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1 IN THE CIRCUIT COURT OF THE STATE OF OREGON
              FOR THE COUNTY OF MULTNOMAH
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 3
   The Estate of JESSE D. WILLIAMS, )
 5 Deceased, by and through )
    MAYOLA WILLIAMS, Personal
                                  ) Vol. 20-A
 6 Representative,
 7
                 Plaintiff,
                                  ) Circuit Court
                                  ) No. 9705-03957
 8
            vs.
 9 PHILIP MORRIS INCORPORATED,
                                   )
10
                Defendant.
                                   )
11
12
13
            A.M. TRANSCRIPT OF PROCEEDINGS
14
15
            BE IT REMEMBERED, That the above-entitled
16
17 matter came on regularly for Jury Trial and was
18 heard before the Honorable Anna J. Brown, Judge of
19 Department No. 7C, of the Circuit Court of the
20 County of Multnomah, State of Oregon, commencing at
21 9:00 a.m., Friday, March 19, 1999.
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       Reported by Jennifer L. Wiles, CSR, RPR.
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1 APPEARANCES: James Coon, Attorney at Law, William Gaylord, Attorney at Law, Ray Thomas, Attorney at Law, Christopher Tauman, Attorney at Law, appearing on behalf of the Plaintiff; James Dumas, Attorney at Law, Michael Harting, Attorney at Law, Billy Randles, Attorney at Law, Walter Cofer, Attorney at Law, Jay Beattie, Attorney at Law, Pat Sirridge, Attorney at Law, appearing on behalf of the Defendant. * * *

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(March 19, 1999)
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 3
              A.M. PROCEEDINGS
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 5
             THE COURT: Good morning.
 6
             Will there be anything for the record
 7
    before we start?
 8
             MR. GAYLORD: No, Your Honor.
9
             THE COURT: Would you go check on the
10
    jurors, please?
11
             THE CLERK: Yes.
             THE COURT: Good morning, everyone.
12
             JURORS: Good morning.
13
14
             THE COURT: Mr. Gaylord.
15
             MR. GAYLORD: Thank you, Your Honor.
16
17
                   DR. VICTOR E. GOULD
18 was thereupon called as a witness on behalf of the
19 Defendant and, having been previously duly sworn,
20 was examined and testimony continued, as follows:
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CROSS-EXAMINATION

1 2

5

3 BY MR. GAYLORD:

- Q. Good morning, Dr. Gould.
 - A. Good morning.
- 6 Q. You and I have not met, I don't believe.
- 7 I'm one of the lawyers representing the Estate of
- 8 Jesse Williams. This is Mrs. Williams mere beside 9 me.
- 10 A. Yes, sir.
- 11 Q. You have testified, you said yesterday,
- 12 in a couple of trials involving claims against a
- 13 tobacco company? Two before this one?
- 14 A. That's correct.
- Q. Okay. You have also testified a number
- 16 of times in depositions in similar kinds of cases,
- 17 haven't you?
- 18 A. One more in which I did not testify in
- 19 trial.

- Q. Just one?
- 21 A. Yes, sir.
- Q. Okay. You have testified in cases on
- 23 behalf of several different tobacco companies?
- 24 A. Two of them, I believe.
- Q. Brown & Williamson?

- 1 A. It may be. I don't recall really the 2 companies.
 - Q. Okay.
- You don't remember if you testified in a Brown & Williamson case?
- A. I don't remember the companies, since I never really dealt with them.
- 8 Q. Okay. You always just dealt with the 9 lawyers?
- 10 A. That's correct.
- 11 Q. Okay. The same lawyers, different 12 companies?
- 13 A. No. Sometimes different lawyers.
- Q. Okay. You testified on behalf of many
- 15 R. J. Reynolds, in a case against them?
- 16 A. Possibly.
- 17 Q. Okay. You testified in prior cases
- 18 against Philip Morris?
- 19 A. As I said, it may be. I don't remember
- 20 the company itself.
- 21 Q. However many cases there have been, in
- 22 each of the times that you have testified, either
- 23 in trial or deposition, isn't it true, sir, that
- 24 your position has been that the pathologists
- 25 involved in the medical case were wrong in their

- 1 interpretation of what kind of cancer it was?
 - A. No, not exactly.
- In the first case I believe my diagnosis
- 5 pathologist.
- 6 In the second case I think I agreed with
- 7 the diagnosis that it was in fact a malignant
- 8 tumor, but I disagreed on the classification of it.
- 9 Q. The first case you are referring to is
- 10 one that was back in 1988?
- 11 A. That's correct.
- 12 Q. That was a case against Liggett & Myers
- 13 Tobacco Company?
- 14 A. As I said, it may have been. I don't
- 15 remember the itself.
- 16 Q. Okay. Let me just see if I can refresh
- 17 your recollection this way. I'm just going to show
- 18 you the title page of a transcript, partial
- 19 transcript, of that proceeding. And just read it
- 20 to yourself. And my only question is: Is that the
- 21 case that you're referring to as the first case
- 22 that you testified in?
- 23 A. That's correct.
- Q. All right.
- 25 And you testified under oath at that

1 time?

- A. I certainly did.
- Q. And I guess I just want to be sure, for a moment, I don't want to belabor it because it is not this case, but you, as you sit there now, it's your recollection that you did not disagree with the pathologist in that case who had been involved in the patient's care?
- 9 A. No. What I said was that I agreed with 10 the diagnosis of the original pathologist who had 11 seen, in fact, the original tumor when it was 12 removed.
- 13 Q. Did you disagree with the frozen section 14 reading of the tumor in that case?
- 15 A. If you are going into that kind of 16 detail, since there were several operations 17 performed, you'll have to be a bit more precise. 18 And I may or may not recall exactly. But what I do 19 recall is that I did agree with the original 20 diagnosis of the tumor.
- Q. Let me just show you, as I read a section of that transcript, since I don't have another copy.
- MR. SIRRIDGE: Mr. Gaylord, can I see what you are showing the witness?

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MR. GAYLORD: Sure. Do you want to see
1
2
    the cover sheet?
3
             MR. SIRRIDGE: Is this the only diagnosis
 4
     in the case?
5
             MR. GAYLORD: May we approach, Your
 6
     Honor?
 7
             THE COURT: Yes.
                          * * *
8
9
           (Whereupon, after a sidebar, off the
10
     record, the proceedings continued, as follows:)
11
            MR. GAYLORD: All right. Thank you.
12
13 BY MR. GAYLORD:
14
        Q. Doctor, I'm just going to read a couple
15 of series of questions and answers and just ask you
16 if this was your testimony at that time, in 1988.
17
             "QUESTION: "Was the frozen section
18 diagnosis at Lenox Hill?
19
             "ANSWER: "The frozen section diagnosis
20 at the time that the surgical procedure was taking
21 place was carcinoids of the lung."
22
             I'm sorry. I misread the question.
23
             "QUESTION: "What was the frozen section?
24
             "ANSWER: "The frozen section at the time
25 the surgical procedure was taking place was
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1 carcinoids of the lung.
            "QUESTION: "Do you know who made that
 3 diagnosis?
             "ANSWER: "Yes. Dr. Harry -- "
 5
             How do you say that name, Juaquim?
           Juaquim.
 6
        Α.
 7
        Q. Do you know Dr. Juaquim?
8
        A. Yes.
9
           "QUESTION: "Do you agree with his
        Q.
10 diagnosis of the frozen section?
             "ANSWER: "No, I don't."
11
             And then later --
12
            MR. THOMAS: I'm having a little trouble
13
14
    hearing you.
15
            MR. GAYLORD: All right.
16
             MR. SIRRIDGE: Objection, Your Honor.
17
    There needs to be something to impeach on. If
18
    there will be a question --
19
             THE COURT: Counsel, he hasn't finished
20 yet.
21
             Go ahead, Mr. Gaylord.
22
             MR. GAYLORD: Thank you.
23 BY MR. GAYLORD:
Q. "QUESTION: "Who did the final pathology
25 of the pneumonectomy?
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"ANSWER: "Dr. Snyder made the final 2 diagnosis. I thought you said whether he had made 3 that diagnosis I just mentioned. "QUESTION: "Excuse me. Do you agree 5 with Dr. Snyder? 6 "ANSWER: "No, I do not." 7 Now, my only question about that, Doctor, 8 first off, is did you give that testimony? Was 9 that your sworn testimony in 1988? A. I think that you are taking those 10 11 questions and answers out of context. That was a 12 very complicated case. And what you are reading, I think, that does not represent the first original 14 excision in the first original diagnosis in that 15 case. It may have represented the recurrence; that 16 you are asking me to remember something that 17 occurred ten years ago or more. 18 But I believe that patient had, in fact, 19 three procedures, the original procedure of the 20 lung tumor, the recurrence of the lung tumor, and 21 subsequently a metastasis. 22 And what I said is that was I agreed with 23 the original diagnosis, namely the first procedure, 24 which is -- which is correct. Q. Was the point of your testimony that

- 1 case, Doctor, that you believe that there was a
 2 different kind of cancer than what the claimant's
 3 attorneys were presenting based on the testimony of
 4 the local pathologists involved in the case?
- 5 A. Some of the local pathologists. If -- to 6 be more exact, because the original pathologist, I 7 believe, diagnosed the case correctly.
- 8 Q. Okay. Did you testify in another case on 9 September 15th, 1997? And I'll show you the title 10 page of that. First off, do you remember that?
- 11 A. Yes, I do.
- 12 Q. Did you disagree with the conclusions of 13 the local pathologist in that case?
- 14 A. Again, I agree with the fact that the 15 tumor was epithelial and that it was malignant; 16 namely, that it was a carcinoma. I disagreed with 17 the final classification of the type, yes.
- 18 Q. Okay. And the reason you were there to 19 testify on behalf of R. J. Reynolds was because you 20 had a different position about what kind of cancer 21 it was than the local treating pathologist?
- 22 A. I certainly disagreed with the diagnosis, 23 yes.
- Q. And then you testified again in a case about two months ago, February 6, 1999, in a

- 1 deposition in Chicago?
- A. Yeah. That was a deposition, yes.
- Q. Okay. That was another case against R.
- 4 J. Reynolds?
- 5 A. As I said, I don't remember which of the
- 6 companies, the company or companies may be
- 7 involved.
- 8 Q. Okay. Let me -- I think it's only fair
- 9 if I show you the cover. Don't read it out loud,
- 10 but just is that the case that you are talking
- 11 about?
- 12 A. Understood. Yes.
- Q. And you agree that is a case against R.
- 14 J. Reynolds Tobacco?
- 15 A. Yes.
- 16 Q. And in that case against was your
- 17 position that the local pathologist had
- 18 misdiagnosed the pathology of the slides?
- 19 A. Essentially, yes.
- 20 Q. Okay. In fact, in some many words, you
- 21 said they misdiagnosed it?
- 22 A. What I said is that I disagree with their
- 23 interpretation, that's correct.
- Q. Okay. On Page 24, I'll just read a
- 25 couple of questions and answers. February 6, 1999.

- 14 "QUESTION: "So, it is your opinion that 2 Dr. Datnow misdiagnosed Jimmy Acton's pathology? "ANSWER: "As I stated, I disagree with 4 the interpretation, yes. "QUESTION: "Then he has misdiagnosed it? 5 "ANSWER: "In my opinion, yes." 6 7 Was that the thrust of your testimony? 8 That's correct. 9 Q. You also were asked yesterday by 10 Mr. Sirridge -- excuse me just a moment. I need to
- 11 find another paper. 12 You were asked about what you charge for
- 13 your work on these cases. Do you recall that?
- 14 A. Yes, I do.
- 15 Q. And you said \$500 an hour?
- A. That's correct. 16
- 17 Q. Have you changed your billing practices 18 since about September 1997?
- 19 No. Α.
- 20 Q. Do you recall giving a statement under 21 oath at that time in which you said that you charge 22 \$10,000 a day?
- 23 A. I was referring to, in fact, it was an 24 exceptional case, because I was referring only, of 25 course, for the day in court. But, as it was,

http://legacy.library.ucsf.@du/tid/efrt07a00/pdf.industrydocuments.ucsf.edu/docs/hjxl0001

- 1 there were a number of postponements, and I was in 2 fact in Florida for five or even six days, and that 3 referred only to one day.
- Q. Okay. Well, let me show you, just so we are talking about the same document. Again, just read it to yourself. A case against Brown &
- 7 Williamson Tobacco Company?
 - A. That's correct.
- 9 Q. That was in September 1997, do you
- 10 recall?

- 11 A. Yes.
- 12 Q. And the disclosure statement that you
- 13 were making, called "Expert Disclosure Statement",
- 14 is a general statement about who you are and what
- 15 you do, and then what you had done in that case and
- 16 what you found in that case, wasn't it?
- 17 A. That's correct.
- 18 Q. And in that disclosure statement, you
- 19 said you listed prior cases that you had provided
- 20 deposition testimony in?
- 21 A. Yes.
- Q. And then you said, quote, "I charge \$500
- 23 per hour for consulting time and \$5,000 per day for
- 24 deposition testimony. I charge \$10,000 per day for
- 25 trial testimony?

- 1 A. That's correct.
- Q. Okay.
- 3 A. It referred only to the single day of 4 testimony.
- 5 Q. Okay. So, you are telling us that that 6 was your charge for one day in that case, but that 7 is not your practice?
- 8 A. No. No. No, I said that that is what I 9 charge for that day only.
- Q. Okay. So, for a day that you here in Portland you are charging the lawyers for Philip Morris \$10,000 a day?
- 13 A. Only for the day that I am in court.
- Q. Okay. Now, you are aware, Dr. Gould,
- 15 that in the medical records for Jesse Williams for
- 16 his cancer there are reports from board certified
- 17 well-trained experienced pathologists reviewing the
- 18 slides and making pathological diagnosis in the
- 19 case?
- 20 A. Yes, I am.
- Q. And do you know Dr. Daisy Franzini?
- 22 A. No, I do not.
- Q. Do you know Dr. Ken Oyama?
- A. I do not.
- Q. Do you have any reason to question either

- 1 of their credentials or their abilities about 2 pathology?
 - A. No, I do not.
- Q. But you are aware that, as you have testified yesterday in this case, you are disagreeing with their readings that they did in their ordinary practice in this case?
- 8 A. I think that the answer is a bit more 9 complicated than that, if you will.
- 10 I, in fact, agreed with their basic 11 diagnosis that Mr. Williams had a tumor that was 12 epithelial and it was malignant, namely that will 13 he had a carcinoma.
- 14 I also agreed with fact that it was 15 poorly differentiated.
- I disagree with the conclusion that it represents an adenosquamous, and I believe it represented a mucoepidermoid carcinoma.
- 19 Q. When you saw that you agree that it's 20 epithelial?
- 21 A. That's correct.
- Q. I think maybe there's a lot of words here that I don't understand very. So, let me make sure how does that turn out to be a point of agreement
- 25 with them. Okay. Is epithelial the name for the

- 1 kind of cells that includes squamous cells?
 - A. And many other kinds of cells, yes.
- $\mbox{\bf 3}$ Q. Okay. So, when you say you agree with $\mbox{\bf 4}$ Dr. Franzini and Dr. Oyama, you are referring to
- 5 their calling it partly squamous?
- A. I'm referring to the fact that they
 called malignant and epithelial, which is implied
 to the word carcinoma. Yes.
- 9 Q. Do you agree that there were squamous 10 elements in the tumor that Mr. Williams suffered 11 from?
- 12 A. I agree that there are cells with 13 squamoid differentiation, yes, as I outlined 14 yesterday.
- 15 Q. Now, you told us that you haven't looked 16 at the cytology?
- 17 A. That's correct.
- 18 Q. And I think we need to understand what
- 19 that means. There's two different kinds of tissue
- 20 from Jesse Williams that were reviewed and used in 21 diagnosis by the local people?
- 22 A. That's correct.
- Q. And that includes the -- I don't know
- 24 where they are, but you have shown us photographs
- 25 of blowups of slides of pink stuff, pink and blue

- 1 stuff, that is the tissue that was actually taken
 2 out of Jesse Williams?
- A. That's correct.
- Q. Right. And that is the pathology slide part of what the local doctors used?
- 6 A. That is a fundamental part on which the 7 diagnosis rests, yes.
- 8 Q. Okay. Just for the sake of understanding
 9 the words, the cytology part, it's -- I think I'll
 10 write that word down because it's easier to grasp a
- 11 word when you see it. Check my spelling on this,
- 12 Doctor. Is it c-y-t-o-l-o-g.
- 13 THE WITNESS: May I, Your Honor?
- 14 BY MR. GAYLORD:
- 15 Q. Just tell me if I got the word right?
- 16 A. Yes, you did.
- 17 Q. Okay. And that is the part that you
- 18 didn't look at --
- 19 A. That's correct.
- 20 Q. -- from Jesse Williams.
- 21 But that Dr. Franzini and Dr. Oyama did
- 22 do so?
- 23 A. Yes.
- Q. And they made a report on that is in the
- 25 medical records for Jesse Williams?

- 1 A. I believe she did, Dr. Franzini 2 authorized that report, yes.
- Q. And when we say cytology, what we are talking about is a different form of tissue taken from Jesse Williams?
- A. No. It actually is not tissue, as such.
 The tissue is represented in the biopsy, which, as
 I said, is the fundamental sampling of the tumor
 and they, by far, are the larger and more complete.
 The other, the cytology, is obtained during the
 same procedure with a little brush that sort of
 scrapes the surface of the tumor and that is put
 onto a slide and so on. So, by necessity, it's
 a -- it's a far more limited sample.
 - Q. It's referred to as brushing?
- 16 A. That's correct.
- Q. And when the pulmonologist, the doctor
 that uses the bronchoscope that goes down the
 windpipe, when that doctor is looking through the
 fiberoptics and seeing what's down there, looking
 at the tumor and describing the tumor, one of the
 things he did was, in addition to taking a bite out
 of the tumor for pathology slides, he brushed the
 surface of the tumor?
- 25 A. Right.

- 1 Q. And took some, whatever, fluid and
- 2 whatever loose material?
- 3 A. Whatever is there, that's correct. And
- ${\tt 4}\,{\tt }$ that is why I said that the tissue, the one that is
- 5 bitten off, that mass, that protrusion into the
- 6 bronchus, is by the very nature of the thing by far 7 larger and a more complete sample.
- Q. Okay. And Dr. Franzini found tumor cellspresent in the brushings in the cytology material?
- 10 A. Yes, she did.
- 11 Q. You didn't look at the cytology, but you 12 read the report?
- 13 A. I certainly did.
- 14 Q. And she found squamous carcinoma cells in 15 the brush?
- 16 A. Yes.
- 17 Q. Okay.
- 18 A. That, of course, is not at all surprising
- 19 given what we see on the biopsy. Of course, what
- 20 she did not see because the sample, as I told you,
- 21 often by necessity, is incomplete, is the mucoid
- 22 components of the tumor.
- 23 Q. Doctor --
- A. So, she'll report what she saw.
- Q. Dr. Gould, when you were talking about

- 1 your credentials and background, Mr. Sirridge
- 2 pointed out that you have traveled to something
- 3 like 50 different cities around the world to give
- 4 lectures on pathology?
 - A. That is probably true.
- 6 Q. It's -- I have the list here somewhere,
- 7 but it's practically every major city in Europe and
- 8 South America, isn't it?
- 9 A. If you consider that we are talking a
- 10 period of time, some 25, 30 years, yes.
- 11 Q. That must be very expensive. Do they pay 12 you for those trips?
- 13 A. Yes, they do.
- 14 Q. In terms of how medicine is provided to
- 15 people in this country, you wouldn't expect Jesse
- 16 Williams or his family to have his tissue looked at
- 17 by bringing somebody back from Europe, in
- 18 Barcelona, or someplace, or bringing you in from
- 19 Chicago to look at Jesse Williams' pathology, would
- 20 you?
- 21 A. Would I expect it?
- 22 Q. Yes.
- 23 A. I doubt it.
- Q. You would expect that a person who smoked
- $25\,\,$ for 40 years and then through dealings with his

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1 local internist got referred to a pulmonologist and
2 got a biopsy taken, you would expect that person,
3 in order to find out what kind of cancer they had,
 4 to rely on the pathologists in the local hospitals
 5 and you would expect -- well, first let's just
   start with that. Wouldn't you expect that to be
7 the way they would do it?
8
        A. In general, yes. But I'm sure, as you
9 and everybody in this court has heard, that there
10 are often questions and second opinions are
11 requested and so on and so forth.
       Q. That seems like very often questions when
12
13 somebody brings a lawsuit against a tobacco
14 company?
15
    A.
            Oh, no.
16
             MR. SIRRIDGE: Objection, Your Honor.
17
    Argumentative.
18
             THE COURT: The objection is sustained.
19
             THE WITNESS: Oh, no. I see --
             THE COURT: Hold on. You don't need to
20
21
     answer that question, sir.
22
             THE WITNESS: Okay.
23
             THE COURT: Your next quit.
24
             MR. GAYLORD: Thank you.
25 BY MR. GAYLORD:
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- Q. Pathologists like Daisy Franzini and Ken Oyama make the diagnosis of lung cancer in every city in America every day of the week, don't they?
 - A. They certainly do.
- Q. One of the things that pathologists use when they make those diagnoses in their practice in every city in America is their basic knowledge of the frequency or rarity of some kinds of tumors; isn't that true?
- 10 A. That is one of the many criteria, as we 11 touched up on yesterday. One of many.
- 12 Q. Okay. One of the things you told us 13 yesterday was that this distinction between 14 adenosquamous carcinoma and high-grade
- 15 mucoepidermoid carcinoma can be a difficult call?
- 16 A. I think if you look at a piece of tissue 17 without additional information, it could be, yes.
- Q. And that is one of the points you were making, I think, is if you do differential diagnosis and you just make a list of the things that might be what you are seeing, that is a two-part list?
- A. That is part of the differential diagnosis. Whether you do it on a piece of paper or in your mind, yes, that is part of the process

- 1 that pathologists do every day.
- Q. I need to make my question more clear,
- $3\,$ Dr. Gould. The list that you would make for this
- 4 tumor is a two-item list?
 - A. Would you please repeat it?
- 6 Q. I thought I understood, and I may have
- 7 misunderstood your testimony yesterday, I think you
- 8 told us that differential diagnosis for
- 9 adenosquamous carcinoma is it's either
- 10 adenosquamous carcinoma or it's mucoepidermoid?
- 11 A. In the context that we were discussing, 12 yes.
- 13 Q. Okay. And I want to be clear about one
- 14 thing. Your diagnosis here is high-grade
- 15 mucoepidermoid?
- 16 A. That's correct.
- 17 Q. Okay. And high grade you talked about
- 18 yesterday, but that is another way of saying poorly
- 19 differentiated?
- 20 A. Yes, it is.
- Q. You agree with Dr. Franzini and Dr. Oyama
- 22 that this is poorly differentiated?
- 23 A. I believe I said so.
- Q. I think you did.
- 25 And when we say high grade or poorly

- 1 differentiated, that is another way of the saying 2 relatively aggressive?
- Again, you have to take it in the 4 context. In the context of the majority of tumors, 5 yes, that would be the case.
- On the other hand, if you believe that 7 it's a mucoepidermoid carcinoma, rather than 8 adenosquamous, the degree of aggressiveness is high
- 9 relative to its low-grade counterpart. But by
- 10 itself, it is not a highly aggressive -- it's not a 11 comparably aggressive tumor to adenosquamous, if I 12 made myself clear.
- Q. All right. So, if this was adenosquamous 13 14 carcinoma, poorly differentiated, then you agree it 15 would be a rapid growing aggressive tumor?
- A. Oh, I would expect with a tumor of that 16 17 size to have wide-spread metastasis and he probably 18 wouldn't have lived very long.
- Well, he didn't, as a matter of fact. 19 Q.
- 20 Α. No. That is actually, again, has to be
- 21 taken into context. He had, when diagnosed, he had
- 22 a very advanced -- already a stage, at least stage
- 23 3 disease, and with metastasis to local lymph
- 24 nodes. So, he was already in a very advanced
- 25 stage.

- What I said is that adenosquamous would not reach that stage without having wide-spread metastasis, which he did not have.
- 4 So, one in relation to the other,
- 5 mucoepidermoid, even though high grade, it is a far 6 less aggressive tumor than adenosquamous.
- 7 Q. All right. Dr. Gould, do you have in 8 mind and in your knowledge and awareness of the 9 occurrence rates for various different kinds of 10 lung cancer?
- 11 A. Yes.
- 12 Q. You are aware, are you not, that 13 adenosquamous carcinoma occurs between ten and 20 14 times as frequently as mucoepidermoid?
- 15 A. It depends on how -- I would not say 10 16 or 20 times. It is more frequent. It depends on 17 strict you are with your diagnostic criteria; but 18 it is definitely more frequent, yes.
- 19 Q. Are you familiar with publications, 20 peer-reviewed literature showing that 21 mucoepidermoid cancer occurs approximately 22 two-tenths of a percent?
- 23 A. Yes, it is an uncommon tumor. No 24 question about that.
- Q. And adenosquamous carcinoma has been

- 1 reported in various series at about four percent?
- 2 A. In my experience, it would probably be
- 3 closer to two percent. As I said, it depends on
- 4 how strict you are with your definitions. It is a
- 5 more frequent tumor. There is no question about 6 that
- 7 Q. So, from your choice of the literature 8 would be that it is only about ten times as
- 9 frequently, rather than 20 times?
- 10 A. I don't know if it is ten times or six
- 11 times. I frankly never looked into that.
- 12 It's not only the literature. It's what
- 13 $\,$ I see every day, and I see a great deal of
- 14 pulmonary tumors.
- But again, it depends on how strict you
- 16 are with your definition. Adenosquamous, no matter
- 17 how strict you are is more frequent than
- 18 mucoepidermoid, yes.
- 19 Q. Do you have any idea how many lung cancer
- 20 cases in Portland, Oregon have been diagnosed and
- 21 treated in reliance on the accuracy of the
- 22 diagnoses made by Dr. Daisy Franzini and Dr. Ken
- 23 Oyama?
- A. No, I do not.
- MR. GAYLORD: Thank you, Dr. Gould.

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1
             THE COURT: Redirect.
2
             MR. SIRRIDGE: Yes. Thank you.
 4
                  REDIRECT EXAMINATION
5
6 BY MR. SIRRIDGE:
7
        Q. Dr. Gould, Mr. Gaylord asked you a number
8 of questions about your consulting activity on
9 tobacco cases.
10
             Do you have any feeling about the
11 percentage of your time or income that has been
12 spent over this last 15 years consulting on tobacco
13
   cases?
            No, I couldn't tell you the time or
14
        Α.
15 percentage, but I'm sure it's minimal.
16
    Q. Doctor, are both adenosquamous carcinoma
17 of the lung and mucoepidermoid carcinoma of the
18 bronchus, are those both malignant epithelial
19 tumors?
            Yes, they are.
20
        Α.
21
            And, Dr. Gould, Mr. Gaylord mentioned
        Ο.
22 Dr. Franzini's diagnosis of the cytology in the
23 case?
24
    A. Yes, he did.
       Q. And I believe you agreed that her
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- 1 diagnosis was, on the cytology, squamous carcinoma?
- A. Yes, that was the diagnosis. There were many squamous carcinoma malignant cells, yes.
- Q. Did Dr. Franzini change that diagnosis after she reviewed the tissue slide with Dr. Oyama?
- A. No, she did not. And I think it is comparatively easy to reconstruct, if you will, that case.
- 9 As I tried to explain before, the
- 10 sampling that one obtains from the cytology has to
- 11 rely on those cells on the surface of the tumor
- 12 that readily discriminate actually the scales of,
- 13 if you will. And so she diagnose what she saw. I
- 14 don't have any doubt about it; only that the mucoid
- 15 component was not there. Even though she knew from
- 16 the other, from the biopsy, that there was such a
- 17 thing.
- 18 Q. I don't think I was clear in my question,
- 19 Doctor. Dr. Franzini reviewed the cytology slide;
- 20 correct?
- 21 A. Yes, she did.
- Q. And Dr. Oyama was the diagnosing
- 23 pathologist on the tissue slide?
- A. That's correct.
- Q. Now, did Dr. Franzini agree with

- 1 Dr. Oyama that this was an adenosquamous carcinoma?
- 2 A. Yes. I think that it is stated that she 3 consulted and that she did agree.
- Q. Now, Doctor, are adenosquamous carcinoma and squamous carcinoma the same type of carcinoma?
- A. No. As I have been trying to state, they are fundamentally different tumors. They do have some similarities, which is the origin of this entire discussion, but the differences are
- 10 significant both in their appearance and in their 11 rate of growth and in their location and the degree 12 of clinical aggressiveness.
- Q. So, would it be your opinion or would it be your view, in reviewing the pathology reports in this case, that Dr. Franzini joined Dr. Oyama's diagnosis of adenosquamous carcinoma?
- 17 A. Yes, she did.
- 18 Q. Doctor, Mr. Gaylord asked you about the 19 times you have been invited to give cancer lectures 20 around the world over the last 25 or 30 years?
- 21 A. Yes.
- Q. Who does pay for your expenses on those trips?
- A. The universities that invited me or the pathologist societies that have annual or meetings

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1 of that kind of -- it's customary. My university,
2 of course, invites American and foreign lecturers.
3 It is normal procedure.
            And Mr. Gaylord asked you about the
        Q.
5 percentage of adenosquamous carcinoma of the lung
   which is reported in the literature?
        A. Yes. Yes, he did.
 7
8
        Q.
            Does that percentage range from
9 approximately point four percent to four percent?
        A. That's right. That is why I said that
10
11 the number of adenosquamous carcinoma will vary
12 depending on how strict or generous you are with
13
   some of your definitions.
             MR. SIRRIDGE: Thank you, Your Honor.
14
15
             THE COURT: Okay.
16
             Thank you, Dr. Gould. You may step down,
17
     sir.
18
             Sir, would you take a seat, please, in
19
     the back of the courtroom? Thank you.
20
             The Defendant's next witness.
21
             MR. SIRRIDGE: Your Honor, we would call
22
     Dr. Jeffrey Swanson to the stand.
23
             THE COURT: All right. Thank you.
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we will have a little bit of arranging to do.

MR. SIRRIDGE: At some point, Your Honor,

24

1 THE COURT: Sure. That is fine. 2 Come on up, Dr. Swanson. DR. JEFFREY S. SWANSON, M.D 5 was thereupon called as a witness on behalf of the 6 Defendant and, having been first duly sworn, was 7 examined and testified as follows: 8 9 THE CLERK: Clerk please seated. 10 First of all, state your name. Spell 11 your first name and your last name. THE WITNESS: My name is Jeffrey Swanson. 12 13 J-e-f-f-r-e-y S-w-a-n-s-o-n. 14 THE COURT: We'll nee to have you speak a 15 bit louder. Everybody way over there has to hear 16 you, please, Doctor. 17 MR. SIRRIDGE: Excuse me. Maybe lifting this just a little, since he's a little taller 18 19 than some of the others. 20 Do you have a glass there? 21 22 23 24

DIRECT EXAMINATION 1 2 3 BY MR. SIRRIDGE: Q. Good morning, Dr. Swanson? 5 Good morning. Α. Q. Dr. Swanson, can you tell the jury what 6 7 your current professional position is? A. I am a staff cardiothoracic surgeon. My 8 9 primary site of practice is at St. Vincent Hospital 10 here in Portland, Oregon. I also hold medical 11 staff privileges at Emanuel; Providence Hospital; 12 and the V.A. Hospital, here in Portland; as well as in the hospitals in Bellingham, Washington; 14 Corvallis, Oregon; Bend, Oregon; Visalia, 15 California; and North Dakota. Q. And, Doctor, do you practice 16 17 cardiothoracic surgery in all of those locations? 18 Α. Yes, I do. 19 I would like to talk about your education Q. 20 and training, Dr. Swanson. 21 Where did you get your undergraduate 22 degree? 23 A. I received an undergraduate degree from 24 Princeton University in biochemistry in 1970.

Q. And where did you go to medical school?

- 1 A. I went to medical school at the
- 2 University of Montpellier, France.
 - Q. Doctor, do you speak French?
 - A. Yes. I write and speak French fluently.
- ${\tt Q}. \hspace{0.5cm} {\tt And} \hspace{0.1cm} {\tt after} \hspace{0.1cm} {\tt you} \hspace{0.1cm} {\tt finished} \hspace{0.1cm} {\tt medical} \hspace{0.1cm} {\tt school},$
- 6 did you do an internship in medicine?
- 7 A. Yes, I did first what's referred to as a
- 8 rotating internship where -- it's an old-fashioned
- 9 type internship where you actually have exposure to
- 10 pediatrics, obstetrics, and gynecology, psychology,
- 11 and emergency room, and all branches of medical
- 12 practice in Moncton, New Brunswick, Canada.
- 13 Q. And following that internship, did you do 14 a residency?
- 15 A. Yes. I came to Portland at that point
- 16 and did a general surgery residency at the Oregon
- 17 Health Sciences University and the affiliated
- 18 hospitals here in Portland.
- 19 Q. How long is a residency in surgery?
- 20 A. It can be variable. In order to have
- 21 board certification, you have to have a minimum of
- 22 five years of training. The Oregon Health Sciences
- 23 University program, as number of other programs in
- 24 the country, require one year of research. And I
- 25 stretched that out into two years of additional

- 1 training. So, for me, it was a seven-year program.
- Q. Any particular reason why you chose Oregon Health Sciences to do your training?
- A. Well, I actually made a choice based on a mentor that I had chosen as a man that I wanted to learn cardiothoracic surgery from, a man that I have subsequently studied under and currently am
- 8 associated with, a gentleman named Albert Starr, 9 who, even at that time that I started my training,
- 10 was a world-wide renowned surgeon.
- 11 Q. And after you completed your surgery 12 residency, did you pursue further training in 13 surgery?
- A. Yes. Well, first of all, during that
 general surgery period I did a two-year fellowship
 in surgical oncology. It is an American Cancer
 Society fellowship in surgical oncology, which is
 basically cancer surgery, where I was exposed to
 all facets of the screening, diagnosis, and
 multi-modality treatment of cancer patients,
 particularly the surgical treatment of cancer
- 22 patients.
 23 Q. Now, is the extra fellowship in surgical
 24 oncology is that a required program for surgeons?
- 25 A. No. That is just something that I

- 1 perused out of my own interest.
- 2 Q. And then it was available here in 3 Portland?
- 4 A. Yes. There is a surgical oncologist at 5 the Oregon Health Sciences University named William
- 6 Fletcher who has a national and international
- 7 reputation, particularly in the treatment of a
- 8 number of different types of lung cancer.
- 9 Malignant melanoma being one of those that he's
- 10 most famous for. And I had done some work with him
- 11 during my general surgery training early and was
- 12 very impressed by him and wanted to spend some time
- 13 learning from him.
- Q. And in that fellowship, did you have an opportunity to study the diagnosis and treatment of lung cancer?
- 17 A. Absolutely.
- 18 Q. Doctor, I would like to ask you about
- 19 your board certifications in surgery. I would like
- 20 to start first with the surgery board. Are you
- 21 board certified in surgery?
- 22 A. I am board certified in general surgery,
- 23 yes.
- Q. And what does that involve in terms of a
- 25 process?

- A. Well, first of all, you have to obviously make it through the selection process and completion of a general surgery, an accredited surgeon general surgical residency.

 And then there is a series of tests, one being a written test, the initial kind of screening.

 And then the final test comes down to an oral review process where you actually pass in front of a group of separate surgeons who will grill you on different aspects of the whole field of general surgery.
- 13 Q. And when did you become board certified 14 in cardiothoracic surgery?
- 15 A. The general surgery boards, I believe, 16 were in 1987.
- 17 Q. Let me back track just a little bit, 18 Doctor.
- 19 Did you pursue extra training in cardiac 20 surgery following your training, your first initial 21 seven years of training?
- A. Yes. After my general surgery in surgical oncology training, I wanted to pursue my original goal of cardiothoracic surgery, and in
- 25 order to do that you have to go on, in spite of the

1 fact that during the general surgery residency 2 you're exposed to a lot of chest surgery, if you 3 want to do cardiothoracic surgery and obtain board 4 certification in that particular be specialty, you 5 have to go on and do another residency. So, I initiated that process by going to 7 work with yet another man for whom I had very high 8 respect, a gentleman named Alain Carpentier, 9 working in Paris, France. And so I spent a year of residency 10 11 working in Paris learning a number of techniques 12 that he had pioneered. He's the man who pioneered 13 the use of the pig valve, for example. 14 And on completion of that year, I came 15 back and finished my cardiothoracic surgery 16 training at the Oregon Health Sciences University 17 with Dr. Stein. 18 Q. So, I'm going to write a couple of words 19 on the board because we have been using them. 20 And you talked about cardiothoracic 21 surgery. Could you break that down for the jury 22 and explain what that means and the derivations of 23 those words? 24 A. It's pretty straight-forward. Cardio

25 obviously refers to the heart. And thoracic refers

- 1 to the entire chest cage and all of its contents.
- 2 And by definition, the American Board of
- 3 Cardiothoracic Surgery requires competency and
- 4 familiarity with the elements of surgery, involving
- 5 not only the chest wall but all of its contents,
- that is heart, lung, esophagus, thymus, and
- 7 pericardium, and a number of different structures
- 8 within the chest.
- 9 So, after your training in Paris and here
- 10 in Portland in cardiothoracic surgery, did you
- 11 pursue a board certification in cardiothoracic
- 12 surgery?
- 13 Α. Yes, I did. I completed my residency in
- 14 1987. And in order to obtain board certification
- 15 in cardiothoracic surgery, you don't have to simply
- 16 complete the residency and then pass the tests; you 17 have to actually do some cardiothoracic surgery and
- 18 show evidence that you have been in practice, and
- 19 then submit for the examinations, which once again
- 20 both are written and oral.
- Doctor, you mentioned the fact that you 21 Ο.
- 22 are affiliated with several hospitals here in the
- 23 Portland area. Have you also held academic
- 24 positions here in Portland?
- A. Yes. Upon completion of my residency

- 1 training, I wanted to maintain some ties with the
- 2 academic world, write some papers, write chapters
- 3 in books; things like that. And so I stayed on at
- 4 the Oregon Health Sciences University as an
- 5 assistant professor. And with that position came
- 6 an appointment on the -- as an assistant professor
- 7 at the V.A. Medical Center. So I stayed and helped
- 8 train other residents and participated in the
- 9 program at the Oregon Health Sciences University,
- 10 running the transplant program, for example, and 11 things like that.
- 12 Q. Are you still an instructor at the 13 Veterans Administration Hospital?
- 14 A. Yes, I am.
- 15 Q. Okay. What does that involve?
- 16 A. That involves going to the V.A. Hospital
- 17 occasionally, seeing patients, going to some of
- 18 their chest conferences, helping residents with
- 19 cardiothoracic surgical cases. Basically, teaching
- 20 cardiothoracic surgery to people who are in
- 21 training.
- Q. And are you involved in any of the
- 23 teaching programs at the hospitals where you are
- 24 affiliated?
- A. Well, yes. We have at St. Vincent

- 1 Hospital, we have an active and long-standing
- 2 international fellowship in cardiothoracic surgery
- 3 where we receive well-trained surgeons from all
- 4 over the world, actually, who are practicing
- 5 cardiothoracic surgery in their own countries; but,
- 6 because of the large volume and our reputation at
- 7 St. Vincent Hospital, they would like to come and
- 8 spend a year or two with us. So, they come, and we
- 9 show them how it's done.
- 10 In addition to that fellowship program,
- 11 I'm also medical director of the School of
- 12 Cardiopulmonary Profusion, which we also have
- 13 situated at St. Vincent Hospital. Cardiopulmonary
- 14 Profusion is just a fancy way of saying running the
- 15 heart-lung machine that is required for cardiac
- 16 surgery in most cases. And so we teach the people
- 17 who run those heart-lung machines.
- 18 Q. And I won't take a long time on this, but
- 19 exactly how does that machine work during surgery?
- 20 A. Well, basically, you have a couple of
- 21 tubes. One tube has to drain all of the patient's
- 22 blood out of the body to the machine. Another tube
- 23 will then bring the blood back into the body. And 24 they are appropriately placed tubes, obviously.
- 25 You can't get them in the wrong places.

And the machine itself takes over the 2 functions of both the heart and the lungs. That 3 is, the pumping function of the heart maintaining 4 circulation of blood throughout the body. And the 5 gas exchange function of the lungs; that is taking carbon dioxide out of the blood and putting oxygen into the blood. Sounds simple, but it's quite 7 8 complex. 9 And you are the medical director of that Q. 10 program? Yes, I am. 11 Α. 12 Now, Doctor, as far as professional Q. 13 societies in surgery and cardiothoracic surgery, 14 are you a member of the Society of Thoracic 15 Surgeons? 16 A. Yes, I am. 17 Q. Are you a member of the American College 18 of Surgeons? 19 Yes. Α. Are you a member of the American 20 Q. 21 International College of Surgeons? 22 A. Yes.

24 Society for Heart and Lung Transplantation?

And are you a member of the International

23

Q.

A. Yes, I am.

http://legacy.library.ucsf.@du/tid/elfr@7a00/pdf.industrydocuments.ucsf.edu/docs/hjxl0001

- 1 Q. You mentioned academic work, Dr. Swanson.
- 2 Do you have approximately 20 scientific
- 3 publications?

- A. Something like that, yeah.
 - Q. And do you occasionally make
- 6 presentations also at medical meetings and 7 conferences?
- 8 A. Yes. Not only presentations of papers,
- 9 but I have traveled throughout the world
- 10 demonstrating cardiac surgical techniques and
- 11 teaching surgeons throughout the world.
- 12 Q. And do your articles and presentations
- 13 deal with both heart surgery and lung surgery?
- 14 A. Yes.
- 15 Q. Okay.
- Doctor, today I'm going to be asking you
- 17 a number of questions about this particular case,
- 18 and I would like you to give opinions to a
- 19 reasonable degree of medical probability. Will you
- 20 do that?
- 21 A. Yes, I will.
- Q. What types of diagnostic procedures do
- 23 cardiothoracic surgeons do in their normal
- 24 practice?
- A. Just manual procedures themselves?

- 1 Q. Yes.
- A. Well, apart from physical examination, which is a manual procedure, we also occasionally perform bronchoscopy, for example.
- 5 Q. Well, let me backtrack a little bit, 6 Doctor, and ask you what types of medical 7 information does a thoracic surgeon rely on in 8 terms of treating patients and understanding what 9 the medical problem is?
- 10 A. That is a broader scope of question,
 11 right. Basically, when you are called to consult
 12 or a patient is referred to your office for
 13 evaluation, you have to consider the whole scope of
 14 their clinical presentation. That would include
 15 their past medical history, their family history,
 16 their presenting symptoms, the whole history of why
 17 they think they are having a problem, whatever that
 18 problem may be.
- 19 And frequently just in talking to the 20 patient, you can orient yourself very substantially 21 to the diagnosis.
- It's been said that if doctors would only listen to patients, they would tell them the diagnosis most of the time.
- Q. What about the use of the x-rays and

1 other radiologic scans and those kinds of things? A. Yes. After complete physical examination 3 of the patient, with specific emphasis on the areas 4 that you're drawn to by whatever presenting history 5 the patient has, you can envision a number of different examinations that may give you added 7 information in making the diagnosis more precise. 8 X-rays oriented towards the site that 9 you're evaluating are one of the earliest and most 10 helpful. 11 An electrocardiogram may come into 12 importance. 13 An ultrasonic-type examination of the 14 body in different parts can sometimes give added 15 anatomic information. Different x-ray-type modalities, such as 16 17 a CT scan or a spiral CT scan or an MRI scan. 18 All of these can give more information, 19 different types of information that can guide you 20 along the pathway to a diagnosis. Q. And I believe you mentioned a 21

22 bronchoscopy as a specific type of diagnostic tool

24 A. Yes. 25 Q. -- thoracic surgeons use.

23 that --

- A. Well, any time you see a word that has uscopy" on the end, it's just using a scope which something to look into a patient in some way. And we can stick scopes in many different areas.
- 7 An otoscope is used for looking in the 8 ear.
- 9 A bronchoscope is just a device that is 10 used for looking down into the trachea and the 11 bronchi, which are the major breathing tubes.
- 12 Q. Now, Doctor, did -- and I take it you 13 also need to review pathology findings and issues 14 from time to time in your practice?
- 15 A. Absolutely, yes, if pathology is 16 available.
- 17 Q. Now, Doctor, in your chest surgery 18 training, that includes all aspects of the 19 diagnosis and surgical treatment of lung cancer?
 - A. Obligatorily, yes.
- Q. And did your board certification exams in thoracic surgery test you on your abilities to diagnosis and surgically treat lung cancer?
- 24 A. Yes.

Q. And, Doctor, when you were recertified

- 1 last year -- were you recertified last year?
 - A. Yes, I was. The American Board of
- 3 Cardiothoracic Surgery makes it obligatory that you
- $4\,\,$ can't just sit around and not pursue any continuing
- 5 medical education. You are obliged to re-pass the $\,$
- 6 examinations every ten years to maintain current
- 7 board certification. And I did that last year.
- Q. And the did those exams test you on the
- 9 latest knowledge regarding the diagnosis and 10 treatment of lung cancer?
- 11 A. Yes. Lung cancer and every other aspect
- 12 of cardiothoracic surgery.
- Q. Doctor, I would like to talk a little bit about your specific practice of surgery here.
- 15 Could you just describe generally to the
- 16 jury what kinds of types of surgery you do and are 17 qualified to do?
- 18 A. Well, I'm part of an extremely active
- 19 group of cardiothoracic surgeons here. We do more
- 20 of this kind of surgery than probably any place on
- 21 the west coast and most places west if Houston.
- Q. How many surgeons are in your group,
- 23 Doctor?
- 24 A. There are -- we have an affiliated
- 25 network of hospitals and cardiothoracic surgery

- 1 practices in these cities that I mentioned earlier.
- Altogether, we must have 12 to 15 heart
- 3 surgeons, and most of those are fully
- 4 cardiothoracic surgery board certified.
- 5 Q. And have you done lung and pulmonary 6 procedures in your career?
 - A. Yes.

- 8 Q. And could you give the jury an idea of
- 9 how many, say, procedures in the pulmonary area
- 10 that you have done?
- 11 A. In the years of my training and practice,
- 12 it's got to be in the hundreds.
- 13 Q. And you have certainly diagnosed and
- 14 operated on lung cancer cases?
- 15 A. Oh, yes.
- 16 Q. When was the last time that you did lung 17 surgery?
- 18 A. I was involved in a lung case on this
- 19 Tuesday. Before that, I did a chest case ten days,
- 20 14 days before. But I hadn't done one prior to
- 21 that for a few months. It's a sporadic thing in my
- 22 individual practice.
- Q. Doctor, I'm going to find an exhibit here
- 24 and ask if you can assist me in showing the jury
- 25 something.

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50
             MR. GAYLORD: No objection for
    demonstrative purposes, Your Honor.
3 BY MR. SIRRIDGE:
        Q. Dr. Swanson, I'm going to show you what
5 has been marked as Defendant's Exhibit 930 and ask
   if you can just identify this?
        A. I know it. I can identify it very well.
7
8
        Q. Could you identify it for the record?
9 It's just a picture of what?
10
        A. Oh. This is a picture. It's a thorax
11 and head outline, containing the major elements of
12 the aerodigestive tract and chest organs, including
   the upper airways, the trachea, the lungs and
13
14 bronchi.
15
            Would it be helpful, Doctor, in
        Q.
16 complaining to the jury how a bronchoscopy is done?
17
    A. Yeah, I think that might be very
18 informative.
```

Would you step down, please?

19

Q.

51 THE COURT: But now he's in the way of 1 2 some of the jurors. So, just a moment. Hold on 3 a second. 4 THE WITNESS: Okay. Okay. Bronchoscopy. Right. I think I 5 6 understand the question. 7 From an historical point of view, you 8 should know really when bronchoscopy was first 9 done it was done with a long rigid hallow tube 10 with a little light on the end of it. And you 11 basically forced the patient to hyper extend 12 their neck, and you jam this thing kind of like a 13 sword swallower down their trachea. And as you 14 might imagine, that wasn't terribly comfortable. 15 Currently, and for many years now, we 16 have had available a device that we call a 17 flexible bronchoscope which takes advantage of 18 fiberoptic technology, so that it can bend and go 19 through torturous places like the nose and the 20 throat, and it can carry light through these

24 tree.
25 What we normally do -- the bronchoscope

bended fiberoptic tables. And you can also see

back, and you can get a very nice image, and it

allows you to go deeper into the bronchopulmonary

21

22

can be introduced either through the mouth or through the nose. But, typically, in an alert, awake patient, you give a little anesthetic to the nose, generally to give the patient a little sedation, just to make them a little more comfortable, less anxious.

And you introduce this flexible scope directly through the nose, back into the pharynx. This upper airway passage here. This is the uvula sitting right there. That is that little thing that hangs down in the back of your throat. And you go behind that, and you can actually visualize, as you are going through this. It's a little like that fantastic journey movie. You can actually see where you are going inside.

So you direct by some controls on the -you know, you have that hold at the top of the
bronchoscope. You can direct the tip of the
bronchoscope to move to the left, to the right.
And as advance it, you can see where you are
going and advance directly past the larynx,
through the vocal chords, and into the trachea.

Now, it's important to try to get an idea of the anatomy that you're seeing all along this whole pathway obviously.

But then you can follow all the way down into the trachea. And in this area where the trachea divides into two, we call it the tracheal bifurcation. And this particular little apex, that little mountain that you see between the two branches, is called the carina. And it's written here for us. And that is where the trachea splits into two major branches; one for the left lung one; one for the right lung, obviously.

And from that point it's just like a tree with a trunk developing into multiple different branches.

And it turns out that the most typical anatomy is that in the left lung there are two large segments called lobes. We divide the lung into large portions called lobes. And then each lobe is divided into a number of different segments.

And so this bronchial tree, as we refer to it, splits into a large branch for each of those lobes, and each lobe or branch subsequently divides into a branch for each segment, with continual division down to where what we call the alveoli, which are these tiny little air sacs. There are 600 million of them throughout the

54 lungs. And we can't get that far with a 1 2 bronchoscope. With a rigid bronchoscope, we could 4 barely get into the main system bronchi. Really, you could just get down to about this level and 5 6 not much further because it wouldn't bend. 7 With the flexible bronchoscope you can 8 easily get down into the lobar bronchi, and sometimes even into segmental bronchi. 9 10 I hope that makes sense. 11 BY MR. SIRRIDGE: 12 Q. Thank you. We'll get back to the exact 13 findings of Mr. Williams' procedure a little bit 14 later.

- 15 Okay. Α.
- Would you resume your seat, please? 16 17 Dr. Swanson, could you tell the jury how 18 you go about keeping current on the issue of lung 19 cancer and other cardiothoracic issues?
- 20 A. Well, we have on going continuing medical 21 education programs in every hospital that I work 22 in. And those medical education programs consist 23 usually of weekly conferences.
- 24 In our division of cardiothoracic surgery 25 at St. Vincent, for example, we have three

- 1 scheduled conferences each week, one of which is a
 2 pulmonary conference, one of which is a cardiac
 3 catheterization conference, and one of which is a
 4 specific teaching conference for residents.
- In addition, there are more less frequent conferences where we review deaths, complications, and a number of different things like that.
- And, I mean, continuing medical education 9 is a huge subject involving conferences that we 10 have citywide. The Portland Heart Club, for 11 example. The Portland Heart Failure Club. 12 Attending national and international meetings. I'm 13 scheduled to go to a meeting in Paris in May, and
- 14 I'll be going to a meeting in New Orleans in April.
 15 Q. Doctor, do you also review the medical
 16 literature in the field of cardiothoracic surgery?
- 17 A. Yes. Yes. There are a number of 18 publications that come out on a monthly basis.
- 19 Q. And does your cardiothoracic group meet 20 regularly to discuss interesting cases in the heart 21 and lung field?
- 22 A. Yeah. This is within the context of the 23 conferences that I was alluding to.
- Q. Dr. Swanson, do you have occasion to deal with cigarette smoking in your practice?

- 1 A. More than I wish.
- Q. And how does that come about? How do you deal with that subject of cigarette smoking? How does it come up?
- 5 A. Well, it just turns out that much of the 6 pathology, much of the disease that I end up 7 operating on is associated in one way or another 8 with cigarette smoking.
 - Q. And so --

- 10 A. In a patient's history, for example, it 11 is one of the first things that you learn about a 12 patient.
- Q. And based on those experiences, Doctor, what are your views on cigarette smoking?
 - A. I hate cigarette smoking.
- 16 Q. Doctor, is smoking related to the heart 17 and lung diseases that you see in your practice?
- 18 A. Yes. Very strongly associated with many 19 of the problems that I deal with.
- Q. And what do you advise your patients with regard to cigarette smoking?
- A. I absolutely counsel them to stop and encourage them in whatever way possible to pursue a smoke cessation program.
- Q. And how do your patients respond to that

1 advice?

- A. Well, most of my patients -- virtually
 all of my patients stop initially. I would say
 most of them do not take up smoking again. Many
 have told me that a scar on their chest is a really
 good reminder not to smoke a cigarette. But some
 do continue smoking or go back to it at some point.
- 8 Q. And, Doctor, do you refer patients to 9 smoking cessation programs in your practice?
- 10 A. Absolutely. I try to get them as much 11 help as they need.
- 12 Q. And are there well-known programs in 13 smoke cessation at the hospitals and also other 14 places in Portland?
- 15 A. I think probably every hospital in 16 Portland, starting with the Adventist program that 17 has been around for years. And certainly now I 18 think everyone has access to smoking cessation 19 programs through the different hospitals, yes.
- Q. Dr. Swanson, is quitting smoking the only health advice that you give your heart and lung patients?
- 23 A. Oh, no. There are so many different 24 lifestyle modifications that come into the diseases 25 that I deal with.

Atherosclerosis, for example, I'm 2 constantly telling my patients to lose weight, 3 avoid fat, get on a regular exercise program. I 4 make a lot of lifestyle modification 5 recommendations. Ο. Do people stop doing all of those things? 7 Α. Some do. Some don't. Dr. Swanson, have you ever served as an 8 Q. 9 expert witness before? 10 A. Yes, I have. 11 Q. How many times? I have testified twice. 12 Α. Q. And are you being compensated for your 13 14 time away from your practice today? A. Yes, I am. 15 Q. At what rate? 16 17 A. \$500 an hour. Q. And, Doctor, have you ever testified in a 18 19 tobacco case? 20 Α. Never. 21 Have you ever consulted on any kind of Q. 22 tobacco case? 23 A. No, I haven't. 24 Q. Dr. Swanson, I would like to ask you some

25 questions about your involvement in this case.

1 Could you tell the jury how you became 2 involved in this case?

- A. Well, my secretary told me that I had received a call from Mr. Dumas, actually. And when I talked with him on the telephone, he told me that he had an interest in the case and he wondered if I would review it, give him an opinion.
- Q. And what were the materials that you reviewed in the case?
- 10 A. Well, initially, he sent me the entire 11 patient's medical -- medical documentation from 12 doctors' offices, hospitalizations, the whole 13 chart.
- And then after having gotten a feel for
 what the questions were, I set about
 refamiliarizing myself of a number of concepts and
 making my understanding of many parts of the issues
 deeper by a literature search that I did through
 Medline, National Institutes of Heath, St. Vincent
 Hospital medical library helped me, I reviewed a
 number of text books.
- 22 Q. Now, Doctor, did you also review the 23 x-rays and the --
- A. Oh, yes, I did.
- 25 Q. -- CT scans?

```
Yes. I had a chances to look at them.
1
        Α.
        Q. Doctor, do you remember when the first
3 chest x-ray that you reviewed was, what year?
        A. I believe it was a routine pre-operative
5 chest x-ray in 1984 prior to epigastero hernia
6 repair.
 7
             MR. SIRRIDGE: Your Honor, I'm going to
8
    have to take a few minutes now to do setup.
9
             THE COURT: Why don't we take the morning
10
     recess while you set up the screens?
11
             MR. SIRRIDGE: Perfect.
12
             THE COURT: Jurors, 15 minutes, please.
13
             Watch your step.
14
             Okay. 15 minutes.
15
             MR. SIRRIDGE: Thank you.
16
17
       (Whereupon, after a recess, the proceedings
                 continued, as follows:)
18
19
             THE COURT: Count jurors, please, Dan.
20
             THE CLERK: Thank you.
21
22
             THE COURT: Bring them in if you have got
23
      them.
24
             I think you are all there.
25
             Okay. Mr. Sirridge.
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MR. SIRRIDGE: Thank you, Your Honor. 1 2 I know this is blocking your view, but we'll be down there quickly. 3 4 THE COURT: Why don't we go down now? The jurors need to see the witness when he 5 6 testifies. 7 MR. SIRRIDGE: Very good. 8 THE COURT: Go ahead and step down, 9 Doctor. Thank you. 10 BY MR. SIRRIDGE: Q. Doctor, let me first ask you, before we 11 12 get started, do you have a specialty within 13 cardiovascular thoracic surgery? A. Well, everyone tends to gravitate toward 14 15 different aspects of chest surgery that interest 16 them most. 17 And I guess largely because of the time 18 that I spent in Paris working with that valve 19 surgeon that I named earlier, a guy with a French 20 name, I developed primarily a reputation for valve 21 surgery, and that comprises probably a good 40 22 percent of my surgery at this point. 23 Because atherosclerosis and coronary 24 artery disease is so prevalent in the American 25 population, I do a large percentage of coronary

- 1 artery surgery, also.
- 2 So, heart surgery as a whole, probably 3 makes up a good 90-93 percent of what I do.
- Q. All right. Doctor, we are going to use the machine here to look at the x-rays. And I think you the indicated before we started that the first x-ray you had seen had been in 1984?
 - A. Yes.

- 9 Q. Could you give the jury a brief overview 10 of Mr. Williams' medical history at that point in 11 '84 so we can start there?
- 12 A. Well, I guess up to that point 13 Mr. Williams' family history was remarkable for the 14 fact that his mother had died of cancer at age 68.
- fact that his mother had died of cancer at age 68.

 Individually, he had had some problems
 with a ruptured appendix and a number of
 staphylococcal infections. He seemed particularly
 susceptible to recurrent staphylococcal infections
 over a period of years thereafter, requiring a
- 20 couple more operations.
 21 And then this hernia surgery that he came
 22 into in 1984 through an incision through one of his
- 22 into in 1984 through an incision through one of his 23 previous operations. 24 But he had been relatively healthy apart
- 25 from those different hospitalizations.

- And that brings us to '84 when he had a Q. 2 chest x-ray?
- Yes. It's part of a standard screening 4 before surgery, before anyone is going to have a 5 general anesthetic, it's a good idea to have a chest x-ray to see that there's no pulmonary 7 pathology, no pulmonary disease that is that is 8 going to interfere with the anesthetic or that, you 9 know, should be addressed prior to any given 10 elective surgery.
- Q. Could you interpret that chest x-ray for 11 12 the jury, the 1984?
- 13 A. Yeah. Basically, we have two views of 14 the chest in 1984, which is standard. I don't know 15 how much education you have had on chest x-rays 16 here, but --
 - Ο. We did have some yesterday.
 - Α. Okay. Good.

- 18 19 So, this is the frontal view. They make 20 you stand like this against the plate. And we call 21 it a PA film because the x-rays are shot from 22 posterior to anterior through the body onto the 23 x-ray plate.
- 24 And what you look for, in kind of a 25 systematic way, is to try and look first at the

64 1 chest cage itself, look at the container that 2 you're looking at. And that basically includes the 3 clavicle here. You can see the scapulae; that is 4 the shoulder blades. And all of the ribs coming 5 out of the spine wrapping around down to the front of the chest. And those are all nice and symmetrical, 8 well-spaced, and I don't see any bony lesions in 9 the ribs or any of the bones themselves. Now, the inferior portion, the bottom of 10 11 what we call the chest, is formed by the diaphragms 12 which basically separate the thorax from the 13 abdomen. 14 And these are represented on a chest 15 x-ray by these rounded cupulaes almost that you see 16 on each side. And those are nice and smooth, also. 17 They are fairly well positioned. And this gas 18 shadow that you see underneath is just some gas in 19 the intestines, in the abdomen. So, that is 20 perfectly normal. So, that all looks pretty good.

22 here on the left -- and we always talk about the 23 patient's side, rather than ours, so you are

25 Mr. Williams' left side.

24 looking at that as the right, but that is actually

21

The one thing that comes to mind is that

http://legacy.library.ucsf.@du/tid/efrt07a00/pdf.industrydocuments.ucsf.edu/docs/hjxl0001

So, where the diaphragm comes in and 2 meets the chest wall, you can see this nice sharp 3 acute angle. We call that the costophrenic angle, 4 because costo stands for ribs, phrenic stands for 5 diaphragm. This is all just Latin terminology. A that angle is nice and sharp, the way it ought to 7 be. We know that that is one of the elements that 8 you should look for in any chest x-ray. 9 And over here, Mr. Williams didn't have 10 than nice sharp little parrot's beak. It's a 11 little blunting. Now, this probably in and of 12 itself isn't a big problem, but it is an 13 abnormality that you would have to say there is 14 something not normal on this chest x-ray. 15 Otherwise, then we start looking at 16 what's contained within the chest, and what's 17 contained in this central portion of the chest is 18 contained a lot of organs, including the heart, the 19 aorta, the big artery that comes up and distributes 20 blood to the whole body, except for the lungs. The pulmonary artery which comes out of 21 22 the right pumping chamber and distributes blood to 23 both of the lungs. 24 And you can see little contours and 25 shadows that are related to each of those. And

1 that is a perfectly normal configuration. His
2 heart is a pretty good size. The contours are nice
3 and smooth and round. There's nothing of any real
4 significance there.

5 This column of darkness that you see
6 coming down here -- you probably learned this
7 yesterday. I'll say it, anyway. Where you see
8 dark, it just means that the x-rays have penetrated
9 more vigorously. They have been stopped by less
10 tissue. So, it's easy for x-rays to get through
11 air, and they will make this part of the film dark.
12 Those are the lungs out here. They are full of
13 air. So, x-rays can go through them easily. It's
14 hard for them to get through bone. So, that part
15 isn't quite as -- it hasn't developed as much from
16 the x-rays.

So this column of air in the middle is the trachea, just like in the picture that were we were looking at earlier.

Big C-shaped column of air, coming down
to right about this level, where you can start to
see what we referred to as the tracheal bifurcation
that we talked about earlier.

And right in the middle you can see kind of that little sharp apex, the little mountain that 1 I referred to as the Carina earlier.

There's a nice white stripe that runs right along the right side, against the patient's right side of that trachea; it's called the right peritracheal stripe, and it's nice and smooth about the same maybe two, three millimeters at most, nice line, runs right down and out on top of the right main stem bronchus.

9 So, basically, I would call this a pretty
10 normal chest x-ray. I look at that and wonder has
11 he had any chest x-rays before that we could look
12 at to see if this is a long-standing thing? Does
13 he have any acute process going on either in his
14 abdomen or in the sac around his right lung?
15 Something like that.

- Q. Okay. And that takes care of the PA?
- 17 A. That is the PA film.

16

So, then we turn the patient sideways and put his side against that x-ray plate and shoot the x-rays through from the side. And you get a totally different appearance.

In the back, the bony structures that you see quite well are the vertebrae. Whoops. Sorry. Stacked right on top of each another. And you can see the ribs coming out of them.

But you look for the spacing between the 2 vertebrae to make sure there's not a collapsed 3 vertebra or something like that or a fracture, any 4 problem with those bones in and of themselves. 5 They are all nice and homogeneous, that is the same texture, and they look just perfect. In the front we see the sternum. And 8 that has a nice smooth arch to it, with this little 9 joint right there between the top part of the 10 sternum that we call the manubrium and the bottom 11 that we call the body, and that is also quite 12 normal. 13 There's a little space, a little white 14 shadow right behind the sternum. That is also 15 perfectly normal and is related to some of the 16 residual tissue from the thymus which is an organ 17 in the chest. That is very important in babies but 18 tends to shrink after you get to about 12 years 19 old. 20 And then this is what the heart looks 21 like from the side. Okay. And that is a perfectly 22 normal-shaped heart, nice and smooth, no 23 enlargement. 24 And here's the aorta, coming out, up

25 toward the head, up in this region. It will give

off branches that go to the brain and to both arms.

And then just in kind of a shepherd's

crook fashion it loops back down and back here in

the back of the chest by the vertebrae. It heads

down into the abdomen, giving branches between all

of the ribs and goes down into the abdomen where it

gives off branches to all of the visceral all of

the organs of the abdomen and then branches to the

legs.

Right in the center of the chest, we see

another of these black columns, and it's the same

black column as here. That is the tracheal air

column, coming down from up in the neck and

black column as here. That is the tracheal air column, coming down from up in the neck and bringing air down to just below the level of that aortic arch, because that is where the trachea bifurcates.

17 In fact, the trachea or the aorta loops 18 right over the top of the left main stem bronchus. 19 And that is one of the reasons that we get this 20 lateral chest x-ray.

21 If you look at that area from the front, 22 what you have is blind spot right here in the 23 center because all of these organ in the center of 24 the chest, what we refer to as the mediastinum, 25 it's just the middle portion of the chest between

- 1 the two lungs, there's the blood in the aorta that
- 2 is fairly dense. The blood in the pulmonary
- 3 arteries that is fairly dense. You have the
- 4 vertebrae behind that area. So, everything right
- 5 here is fairly opacified, and you can't see clearly
- 6 on this examination. So we turn the patient
- 7 sideways, and there's a nice clear spot in here.
- 8 So, once again, this all looks like
- 9 fairly normal anatomy to me.
- 10 You can also see in addition to this
- 11 white stripe here that I mentioned in the front of
- 12 the chest which is perfectly normal, there's a
- 13 white stripe that runs right along the back of the
- 14 trachea all the way down to where it splits into
- 15 the two branches that we call the posterior
- 16 tracheal stripe.
- 17 Q. Good. Thank you, Doctor.
- 18 So, all things considered, would you
- 19 consider this a fairly normal chest x-ray?
- 20 A. I would clear him to go to surgery. It
- 21 looks pretty good.
- Q. Let's take a look at 1986 on this. I
- 23 will just put this down, and we can move these
- 24 over.
- 25 A. Sure.

- 1 Q. Doctor, would you explain to the jury why 2 Mr. Williams happened to have a chest x-ray in '86?
- A. In 1986 I believe he was evaluated for a cough productive of some yellowish green sputum.
- 5 Q. Could you evaluate this chest x-ray for 6 the jury, please?
- 7 A. Well, most of what I have said before 8 pertains to these films, also. That is you can see 9 the abnormality of the nice sharp costophrenic 10 angle on the left and blunting of that angle on the 11 right.
- Now here it's nice to, for the
 radiologist or surgeon involved in this patient,
 it's nice to be in 1986 and look back and say, oh,
 that was already there in 1984, and he's been fine
 for the last two years, so it's probably not
 something that I should worry about. It might be
 related to some old pleurisy, could even
 conceivably be related to the problem that he had
 in his abdomen with all of the ruptured appendix
 and all of the abscesses that he had in his
 abdomen.
- So, once again, pretty much everything that I said before pertains. Heart, mediastinum, nice. Mid-line trachea coming right down. Nice

bifurcation. You can still see the carina fairly
clearly there, and the right paratracheal stripe is
fine.

If you were very picky about looking at this film, you might notice this little white line coming across, starting in the center of the chest and working its way out to the edge of the chest.

And that is a normal line, but it's not normally seen, and it's a line that represents the division between the upper lobe of the right lung and the middle lobe of the right lung. Which I think I said earlier there are three lobes on the left and there are only two on the right. So you only see this fissure, we call it. It's called the minor fissure.

And sometimes that can really fill up
with fluid. It can really spread. And it can even
give what we refer to as a pseudo tumor, if there's
a lot of fluid in it. It might be related to heart
failure. This is a very minor increase in fluid,
and I probably wouldn't be concerned about it.

Q. And how about the lateral?

22

23 A. On the lateral, pretty much -- I'm 24 sorry -- everything again that I said before still 25 pertains. You can see these little stripes that we 1 are referring to that are so important. And again 2 you see the shape of the diaphragm. That is fine.

And here on the lateral you can see a little white line running obliquely from high in the back to low in the front, and that is what we

6 call the major fissure which is between the upper 7 lobe and the lower lobe on the left here.

And but here again, the tracheal air
column looks pretty good. There is a nice clear
space. And it's referred to as the subcarinal
clear space on a chest x-ray because it's that
space just underneath where the trachea splits into

- 13 two, and it should be nice and clear just like 14 that.
- 15 Q. All right. Would you call this basically 16 a normal chest x-ray?
 - A. Basically, a normal chest x-ray.

- 18 Q. Okay. When was the next chest x-ray that 19 you reviewed, Doctor?
- A. In 1991, he presented with more -- as a matter of fact, throughout, throughout the late '80s Mr. Williams actually was seen on a number of occasions a with chronic, recurrent cough productive of sputum, usually not associated with a fever. And so he was given a number of courses of

1 antibiotics for this chronic recurrent cough during 2 that time.

And in 1991 he presented again. And, as 4 I recall, it had been a fairly persistent cough, 5 and his wife was concerned about it. And he had started at this time to notice some blood in his 7 sputum, which is a real red flag for us. It's what 8 we refer to as hemoptysis; basically, "hem" 9 standing for blood in the sputum.

10 And so his treating physician quite 11 appropriately got a chest x-ray to look for some 12 cause for this blood in the sputum.

13

- Q. Could you explain to the jury your 14 interpretation of this x-ray in October of 1991?
- 15 A. Yeah. Well, again, on this frontal or PA 16 chest x-ray I saw nothing of any concern. 17 Everything looked quite the same to me.
- 18 This left-sided diaphragm is a little 19 higher than what we would expect but still fairly symmetrical. In general, because of the liver, 20 which sits right under the right diaphragm, in most 21 22 people the right diaphragm is going to be a little 23 higher than the left. So when the left what we
- 25 something to be a little concerned about, but, you

24 call hemi-diaphragm sits a little higher, it's

- 1 know, with this amount of change I wouldn't be 2 concerned about it.
- The gas under the diaphragm, again is in the viscera, in the stomach, or the colon or small intestine, and that is of no concern.
- 6 Heart size, heart shadow, mediastinum 7 shadow, all looks good.
- 8 That minor fissure stripe that we had 9 seen in 1986 is not there. The right costophrenic 10 angle remains unchanged.
- So, if I had looked at that and compared it to 1986, I would have called it normal again.
 - Q. All right. How about the lateral?
- 14 A. Well, it's funny about the lateral
- 15 because, to be perfectly honest, when I first
- 16 reviewed these films it looks like a perfectly
- 17 normal examination to me, also. I did compare it
- 18 with 1996 and --

- Q. Shall we do that?
- 20 A. Not 1996, but 1986 I compared it, and it
- 21 looks like there had been no change to me. So, I,
- 22 initially, thought that this represented yet
- 23 another normal chest x-ray.
- Q. Did you change your mind at some point?
- 25 A. Well, yeah. After I saw the subsequent

- 1 films that came five years later in 1996, the
- 2 changes there were so evident that then I went
- 3 back, because it's a standard radiological
- $4\,$ procedure and standard evaluation is to compare, as
- 5 I mentioned earlier, to previous studies.
- 6 And after I saw a lateral examination in
- 7 1996 what was quite evident then, I came back and
- 8 was struck by an abnormality that is quite visible
- 9 on this film.
- 10 Q. Doctor, does that happen sometimes in 11 your practice, where you will go back in time and 12 see something which was not --
- 13 A. Oh, absolutely.
 - Q. -- noticed the first time?
- 15 A. You have to do it. If you don't -- if
- 16 you don't compare to previous studies, you are
- 17 going to miss things. And it is -- you're
- 18 depriving yourself of the entire context of the
- 19 patient's medical if you don't do that comparison.
- Q. Would it be helpful, Doctor, to put up
- 21 January of '96 to compare it so you can further
- 22 explain?

- 23 A. Yeah, I think so.
- Q. Is there any significance to the x-rays
- 25 some of them being sideways and some of them being

1 up and down?

- A. That is just x-ray technician technique and different hospitals and not any real significance, no.
- 5 Q. Now, could you explain to the jury your 6 view of this film and how it relates to your view 7 of the 1991 film?
- 8 A. Yeah. Well, I guess, just to get right 9 to the meat, and not bore you with the whole 10 examination again, basically, most of that chest 11 looks just as it did on the PA examination back 12 here in 1991, and I still call this a normal PA 13 chest x-ray.
- But if you look closely, and remember when I talked about -- am I -- I'm sorry, I'm getting in your way again.

When I talked about that white stripe,
the little two to three millimeter stripe that we
call the right paratracheal stripe, and you can see
how it comes down nice and smoothly over here, just
like that, all of that way. And here is the aorta
coming like that. So there's a little density
right adjacent to it. But that is nice and smooth
all the way down to there.

Here I think this is probably going to

- 78 1 jump out at all of you, particularly when I point 2 at it. You can see that that right paratracheal 3 stripe comes down, and here is a definite change. 4 It should be coming right through here just like 5 that, just like it does over here, but there's an abnormality in there. There's a density right 7 adjacent to where the trachea is bifurcating. And 8 that jumped out at me on my initial examination of 9 this chest x-ray. So, when that particular area which, as I 10 11 mentioned earlier, is kind of a blind spot on the 12 PA chest x-ray, when that catches your attention, 13 then you go and look at the lateral chest x-ray. 14 And here again we have the tracheal air 15 column coming down, and you can see that all of 16 that clear space that I talked about down here is 17 now obliterated. There's a large shadow 18 encroaching here and extending up to this area 19 here. And there is this posterior tracheal stripe
- 22 deformity right there.
 23 So, when I saw that, I was quite
 24 concerned that that represented tumor. That was
 25 eventually diagnosed in Mr. Williams.

21

that comes down, and it's just gone right there.

And there is what appears to be kind of a bulging

- And so I came back and looked again at
- $2\,$ the 1991 film, continually doing this comparison.
- 3 And sure enough, though I hadn't noticed this
- 4 before, you can see that even back in 1991 this
- 5 little thin posterior tracheal stripe comes down to
- 6 about there, and then here's this divot where it
- 7 just disappears, and it even starts up again a
- 8 little bit down there. But it's totally missing
- 9 right in the middle, just adjacent to the aortic 10 arch.
- So, yeah. Now, in retrospect, I mean, I
- 12 did not catch it on my first examination. But in
- 13 retrospect you can see that what eventually turns
- 14 into a fairly striking abnormality did have
- 15 evidence of its presence already in October of
- 16 1991.
- 17 Q. Dr. Swanson, do you have an opinion as to
- 18 whether this abnormality that you now see in
- 19 October of 1991 is the cancer which was later
- 20 diagnosed in late '96 in Mr. Williams?
- 21 A. Yeah, absolutely.
- Q. And what is that opinion?
- 23 A. Oh. I'm sorry. Absolutely, that is the
- 24 same tumor. I'm quite convinced. I mean, it's
- 25 exactly the same location, and it has just become

- 1 much more prominent. And that is typical of tumor
 2 growth over a period of years.
- Q. Doctor, did you continue to review x-rays after this in February and in September?
- 5 A. You bet. Yeah, we saw them all the way 6 through.
- 7 Q. Would it be helpful to see both February 8 and September?
- 9 A. I don't know whether we need to waste 10 much time on February. It looked pretty much the 11 same. I don't think there was much difference 12 between February and January. But --
 - Q. Here's September then.
- 14 A. In September, as a matter of fact, maybe 15 we should take down '91 because it's kind of 16 interesting to see the progression, one film at a 17 time.
- 18 Q. Okay. Excuse me. I'll just take these 19 down.
- 20 A. Let's see, where was -- here's January.
- 21 Q. Okay.

- 22 A. Okay. So, now that you're all
- 23 radiologists, I'm sure that by the time it gets to
- 24 this stage you all would have picked it up.
- There's massive deformity here in this

- 81 1 area here that we described before, bulging all the 2 way out into this area. All of this relative 3 opacification, that is x-rays that have been 4 stopped by something dense, has now blossomed since 5 this little bud, I guess, to use the same metaphor, earlier in the year. 7 Also, there's an appearance of some 8 increased density over here under the aortic arch 9 and extending out over the pulmonary artery. So, on this PA film, it's now quite 10 11 remarkable, this filling up with some kind of a 12 mass on that x-ray. 13 And similarly, on the lateral, even if 14 you compared this x-ray with this one, now here 15 again you can see the major fissure, the division 16 between the upper and lower lobes, has filled up 17 with a little bit more fluid, still not dramatic,
- 19 And here you can see the tracheal air 20 column coming down again.

18 but a little abnormal.

- 21 And then all of this area has now filled 22 in with an opacification. The tumor is quite
- 23 evident and has gotten quite large at this point. 24 Q. Dr. Swanson, would it be helpful to show 25 a progression of the x-rays from 1986 to 1996?

82 You mean, just put up all of the laterals 1 Α. 2 here? Would that be helpful in explaining this? Ο. Sure. Α. I'll make a search of '96 here. 5 Q. Let's see. It's '96. There's '84. 6 Α. 7 There's '86. Got it. 8 Q. Doctor, could you show the progression of 9 Mr. Williams' cancer beginning in 1986? A. Okay. Its clear. We have just put up 10 11 the lateral x-rays here because that is where the 12 findings, though subtle, were the earliest, and 13 it's quite dramatic if you watch this progression. 14 Here we are talking about a normal 15 tracheal air column coming down to the bifurcation 16 into the right and left main stem bronchi, right 17 underneath the arch of the aorta, as I talked 18 about. 19 You can see that nice, smooth continuous 20 white line.

22 is that divot we mentioned. I wasn't smart enough 23 to see it the first time around, but when you go 24 back and look at it it's sure enough there.

Now you move on to 1991, and here again

And then in 1996, not only has that divot

- enlarged quite a bit with bulging into this tracheal air column, you can you see this huge deformity, but this whole what we call the subcarinal clear space. Okay.
- There, even in 1991, when this was just a fairly subtle finding here, this subcarinal clear space was quite good, and here it's starting to fill up with a density. Densities aren't good in the chest.
- 10 And then this is, what, January to 11 September, nine months later. The findings are 12 quite dramatic, and it's really kind of exploded in 13 this whole area.
- Q. Dr. Swanson, let me show you an exhibit which was marked an identified yesterday, Defendant's Exhibit 624 and ask you if --
- 16 Defendant's Exhibit 624 and ask you if -17 A. I'll put it right up there.
- 18 Q. Okay. And ask you if this is a blowup of 19 the lateral films from 1986, 1991 and 1996 of the 20 three films that are here, here and here?
- 21 A. Could I just step out here a second? 22 Yeah, that looks perfect.
- Q. Doctor, is this a fair and accurate representation of the particular area within these different x-rays from 1986, 1991, and 1996?

1 Α. Yes. Q. Okay. Doctor, would be take this exhibit 3 and explain the area again that we are speaking 4 about? 5 Okay. Α. 6 MR. GAYLORD: Excuse me. 7 Your Honor, I guess I would object as cumulative. I think he's just going to show us 8 on photograph of the x-rays what he just showed 9 10 us on the x-rays. 11 THE COURT: Ask a different question on 12 new information. MR. SIRRIDGE: All right. 13 14 BY MR. SIRRIDGE: 15 Q. Doctor, could you evaluate the area 16 within the two circles? 17 The area within the two circles, yes. 18 This circle encompasses that little 19 cup-shaped obliteration of the posterior tracheal 20 stripe that we had been concerned about in the 21 October of 1991 lateral chest x-ray. 22 And the large circle in January of 1996 23 is encircling the now rather dramatic mass that has 24 accumulated in this area with obliteration of what 25 I referred to as the subcarinal clear space and

- 1 really flattening of the tracheal air column.
- Q. Dr. Swanson, is this the area in January of 1996 that caused you to go back and look at the
- 4 October '91 film again in that area? 5 A. Yes. Yeah, absolutely.
- Q. Doctor, would it be helpful to put the
- 7 series of x-rays from the PA from the same time
- 8 period, 1986 to 1996, to summarize your view of 9 those?
- 10 A. Sure. I would be happy to.
- 11 Q. Let's see. January of '96, September
- 12 '96.
- A. Do you have a '91? There's a '91. This
- 14 one isn't marked or even on the thing here. I
- 15 think this was '86.
- 16 Q. Yes. Doctor, I guess I'll frame the 17 question here.
- 18 You testified earlier that it was a
- 19 1990 -- January of 1996 that you first noticed on
- 20 the PA the abnormality?
- 21 A. Yes.
- Q. And could you just point that out in 1996
- 23 and compare it?
- A. Yes. In comparison to the previous '86
- 25 and '91 films, I was struck by the deformity of the

- 1 right paratracheal stripe, and this bulging density
- 2 along the trachea or along the tracheal
- 3 bifurcation, sitting just above where the right
- 4 main stem bronchus comes off.
- 5 And then this same mass seems to have
- 6 increased rather dramatically and extended
- 7 throughout the entire right lateral portion of the
- $8\,\,$ chest of the mediastinum, that middle portion of
- 9 the chest in later 1996.
- 10 Q. Let me ask you. After the x-ray, the
- 11 chest x-ray in September of '96, were there further
- 12 radiographic studies done on Mr. Williams?
 - A. He had a CT scan.
- Q. And have you reviewed that CT scan?
- 15 A. I did.

- 16 Q. Would it be helpful to just summarize
- 17 that CT scan, since the jury saw it yesterday, with
- 18 an exhibit that might allow you to describe where
- 19 the cancer is located?
- 20 A. Sure.
- Q. Doctor, I'm going to show you this
- 22 exhibit, it is marked as Defense Exhibit 919, and
- 23 ask you if you can identify it?
- 24 A. Yeah. This is a representation of the
- 25 trachea and the bifurcation of the trachea with its

1 main stem and segmental bronchi entering the right 2 and left lungs. There is some representation of 3 pulmonary arteries and veins. You'll notice that I didn't make the 5 mistake when I pointed at the blue one and called it an artery and the red one when I called it a 7 vein because in the lungs that is the way it works. 8 And then there's the lymph drainage also 9 represented. It's another circulation through the 10 tissues, lymphatic drainage. It serves to clean 11 out all of the tissues of the body and its circulatory system itself. That eventually empties 12 13 back into the venous drainage in the neck. 14 And these little kind of ovoid, 15 olive-like balls along the way are what we call 16 lymph nodes and they are little stations 17 responsible for filtering anything that is washed 18 out of the tissues, frequently, foreign bodies, 19 bacteria, anything like that, and bringing them into contact with the cells of the immune system. 20 So that the immune system can recognize this 21 22 invasion of a foreign something or another and 23 start to try to fight it.

Q. Doctor, based on your review of the CT scan of the chest, can you summarize where the

- 1 cancer was identified on this that CT can?
- 2 A. Sure. Actually, before I do that, I 3 would like to tell the jury in reference to this
- would like to tell the july in lefelence to this
- 4 chest x-ray finding, you probably all understand
- 5 anyway, but this would represent that tracheal air 6 column that we were talking about.
- 7 The right paratracheal stripe would be
- 8 coming right down like this. And the abnormality
- 9 that I see on the frontal chest x-ray in 1991 is a
- 10 little opacity that is probably right about here.
- 11 Okay.
- 12 Q. I think we have got that one right there,
- 13 Doctor, if you want to point it to the jury?
- 14 A. Here it is, right there. Okay. That
- 15 will little almost triangular mass that you see
- 16 there would be situated right about in this region.
 - Q. And that is in January of 1996?
- 18 A. January 1996.
- 19 Q. Okay. Back to the --
- 20 A. So, then the CT scan, which was in late
- 21 1996, when the tumor was quite large and diffuse,
- 22 demonstrates mass, the tumor mass.
- Now, this can be one of two things. It
- 24 can be either a direct spread of the tumor itself
- 25 or spread of the tumor through these lymphatic

- 1 channels and invasion and colonization of lymph 2 nodes along the way, because this whole tumor is 3 being washed by this lymphatic system. And so 4 cancer cells will obligatorily be carried along in 5 that filtration system. And first place they'll be 6 filtered out will be the lymph nodes. If the immune system is unable to kill 8 them, they will set up a little colony there and 9 start to grow, just like the primary cancer is 10 growing in its initial spot. 11 So, that CT scan, as I recall, showed 12 quite a large mass here in an area that is called 13 the azygos node. That is kind of an historical 14 term that relates to a big vein that drains a lot 15 of the veins in between the ribs and the right 16 chest and empties into the superior vena cava, the 17 upper vein drainage into the heart, right at this 18 area. But it is indeed a large right paratracheal 19 mass. 20 There's also mass extending down into
- 21 what we call the hilum. The hilum is where the 22 bronchus enters the lung parenchyma, the lung 23 sponge itself. So, down into this area. 24 There's also a quite prominent mass in 25 this infra-carinal region which would explain the

- obliteration, what I referred to earlier as the subcarinal clear space. And I think there was even a little bit of tumor that spread over into the left side.
- 5 Q. Doctor, in your opinion, is the cancer in 6 Mr. Williams at this stage in an advanced stage?
- 7 A. Yes. It's quite advanced. It is a 8 large, very advanced tumor. And, as a surgeon on,
- 9 I think of the term "advanced" in terms of what I
- 10 can do for it. And if I see a tumor that I cannot
- 11 safely remove, that is a very advanced tumor. And
- 12 this clearly, because of its position and its
- 13 invasion was an advanced tumor. I would not have
- 14 been able to remove this tumor.
- 15 Q. Now, Doctor, at this point, after the CT 16 scan, what diagnostic procedure was done on 17 Mr. Williams?
- 18 A. Well, that is when he went and had the 19 bronchoscopy, just like we talked about earlier.
- 20 Q. You described that procedure earlier. 21 Where did the person who did the -- was
- $22\,$ the person who did the bronchoscopy Dr. Turner?
- 23 A. I believe he was, yes.
- Q. Could you demonstrate for the jury what
- 25 he saw during the bronchoscopy?

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A. His report refers first to a little bit
of minor deformity. Actually m,in the region of
the pharynx, prior to passing through the vocal
chords. He didn't describe it as being anything of
great concern. But I think he did note that there
was a little bulge at that area. It could have
been related to lymph node spread from this tumor
that we're unaware of or it could just be the way
Mr. Williams was.

But when he encountered the real
pathology is when he got down here. And as he
approached the tracheal bifurcation, he noted what
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approached the tracheal bifurcation, he noted what
he referred to as a large tumor bulging into the
lumen -- the lumen is what we call the central
space of any tube -- bulging into the inner part of
the trachea, along the right side, here at the
tracheal bifurcation, extending down into the right
main stem bronchus and extending so dramatically
and circumferentially that the lumen, again the
amount of space that he had to pass through, was
reduced to one quarter of its normal size.

So, the air flow through that right main

23 stem bronchus was severely limited. Limited so 24 much to the fact that he couldn't even get his 25 bronchoscope through it. And that is a tiny little

- 1 black tube. It's a nice flexible thing. As I
- 2 said, you can usually get way out into these small
- 3 bronchi. And he couldn't even get through this
- 4 obliterated mass.
- 5 He also made reference to some extension
- 6 of the tumor across this area we call the carina
- 7 down into the posterior aspect, the back part of
- 8 the left main stem bronchus.
 - Q. Doctor --
- 10 A. Very extensive.
- Now, he can't see with a bronchoscope.
- 12 See, a CT scan and the bronchoscope are
- 13 complementary in what they show you. The CT scan
- 14 will show you everything around, but from the
- 15 inside of that trachea he can't see those big lymph
- 16 nodes on the outside, unless they are so big that
- 17 they actually start bulging through the wall of the
- 18 trachea.

- 19 Q. Okay. Where the bronchoscopy findings by
- 20 Dr. Turner where they consistent with the findings
- 21 on radiology that related to the airway itself?
- 22 A. Perfectly consistent.
- Q. Doctor, would you take your seat, please?
- 24 Dr. Swanson, during the bronchoscopy
- 25 procedure that we just described, did Dr. Turner

- 1 retrieve or take some tissue for further analysis? A. Yeah. That is one of the great 3 advantages to doing the bronchoscopy is that it 4 gives you access. If you can actually see the 5 tumor and approach it, you can take specimens. There's a long wire with a little tiny cup-like 7 pincer at the end of it. You can stick right 8 through the bronchoscope. It comes right out the 9 end. As you are looking through the bronchoscope, 10 you can see your wire with a little pincer advance 11 right under your vision, and you can take it out. 12 And by manipulating it from up here at the top, you can open the jaws of that pincer, push it up 14 against the tumor, and take a bite of it. 15 There's also a little device also mounted 16 on a wire, very similar to a toilet brush, very 17 tiny, and you can stick that down and rub it up and 18 down against a tumor. And you can even inject a 19 little bit of fluid and suck that fluid out and try 20 to get any cells that might be sloughing off of the tumor and send them all off for examination under a 21 22 microscope.
- Q. Doctor, were those materials sent to the pathology lab?
- A. Yes, absolutely.

Q. And was there a diagnosis from the 2 pathology lab with regard to the tissue sent there? A. Yes. The tissue, which I examined, that 4 the biopsy specimens, there were multiple little 5 bites taken giving a total of about a half a centimeter's worth of tissue for them to fix and 7 stain in the appropriate fashion and look at it. 8 And the diagnosis was a poorly 9 differentiate carcinoma with both squamoid and 10 adeno-type of differentiation. Q. What does that pathology diagnosis mean 11 12 to you as a thoracic surgeon? 13 A. Well, any time you talk about poor 14 differentiation of a tumor, you are speaking about 15 a loss of what a cell was supposed to be. It has 16 forgotten what it is supposed to develop into. All 17 of the cells in the body, all of the organs in the 18 body develop from one cell starting out. 19 And under the blueprint of DNA and the 20 magic of genetics, the cells in the liver learn how to be liver cells. The cells in the brain learn 21 22 how to be brain cells. They specialize for their 23 different functions. 24 We call that differentiation, as the cell 25 goes from a very bland, you know, cell that has no

1 special characteristics, and develops into a very
2 specialized functional cell for any given part of
3 the body.

And in the lung and in the trachea and in the bronchi, just like in every other organ of the body, there are some very specialized cells that develop.

So, when you get a report back that says that a tumor is poorly differentiated, what it tells you is that the cancer has lost its way. It doesn't know how to become what it was supposed to be anymore. The cells are no longer under the control of that blueprint like they were supposed to be. And that is that is what a cancer usually is. It's just a wild proliferation of cells that have lost their consciousness of what they should be, and that is what his tumor was.

- 18 Q. And, Doctor, was Mr. Williams' tumor 19 removable by surgery in September of 1996?
- A. No, absolutely not. In order to get that tumor out, you would have had to replace parts of the organs that you just couldn't do.
- Q. Now, would Mr. Williams' tumor have been treatable by surgery in January or February of 1996?

- 1 A. No. Still, that was an advanced tumor 2 that was not what we call surgically receptacle.
- 3 You could not get it out.
- Q. What type of cancer treatment did
- 5 Mr. Williams receive in late '96?
- 6 A. He ended up getting a course of 7 chemotherapy and radiation therapy.
- 8 Q. Okay. And how did that course of 9 treatment proceed?
- 10 A. Well, I believe there was a little early
- 11 reduction in tumor size, what a medical oncologist 12 would call a partial response to treatment, but
- 12 would call a partial response to treatment, but 13 obviously it was not a very durable response and
- 14 the tumor went on to kill him.
- Q. Dr. Swanson, are you familiar with the term differential diagnosis?
- 17 A. Yes, absolutely.
- 18 Q. And how do you use that term?
- 19 A. Well, differential diagnosis is simply
- 20 putting together all of the clues that you have as
- 21 to what a patient has and coming up with a list of
- 22 potential answers and sifting out the relative
- 23 importance of the different clues and how they are
- 24 guiding you toward one or another of the answers,
- 25 the final diagnosis of what a patient has.

- Q. Doctor, I would like to ask you a few questions about the different types of lung cancer, adenosquamous, I'll start with adenosquamous carcinoma.
 - A. Yes.

- 6 Q. Is that a common or an uncommon type of 7 cancer?
- 8 A. It's very uncommon.
- 9 Q. And how would you describe that generally 10 as a cancer cell type?
- A. Well, an adenosquamous carcinoma is one that has developed from two different types of specialized cells within the lungs, that I was referring to before, or a cancer that, at least in losing its blueprint, in losing, forgetting its way; it has tried to specialize a little bit toward the squamous cells that are normal within a lung and a little bit toward the more gland-forming or we refer to adeno, that is a gland-forming cells within the lung. And both elements are present.
- 21 That is the microscopic definition.
 22 Q. Doctor, well let's move to the clinical
- $23\,\,$ presentation of adenosquamous carcinoma of the
- 24 lung. And I will try to retrieve one exhibit that
- 25 I'll just go ahead and bring it up next to you then

- 1 there and ask you what are -- where does
 2 adenosquamous carcinoma of a lung usually arise?
- A. Well, adenosquamous carcinoma is a tumor that is known as a peripheral cancer. Peripheral meaning that it occurs usually out away from the central portion of the chest, in the lung parenchyma itself or in some of the segmental bronchi, fairly far from the center portion. This mediastinum that we referred to earlier.
- 10 Q. Dr. Swanson, is it a tumor that generally 11 grows inside of major airways in this area?
- 12 A. No, not at all, not major airways. It 13 can by its bulk obliterate peripheral airways, much 14 as an adenocarcinoma does.
- 15 Q. And that would be in the outside of the 16 lung?
- A. Yes, further out this way. And it
 effects the smaller bronchi so they are easier to
 obliterate, and it can frequently present
 clinically with what looks like pneumonia on a
 chest x-ray because there's what we call an
 infiltrative pattern where there's not air getting
 into the portion of lung downstream from the
 obliterated bronchus.
 - 25 Q. We have talked about the growth of

- 1 patterns, the growth patterns of cancer,
- $2\,\,$ Dr. Swanson. Is adenosquamous carcinoma of the
- 3 lung an aggressive type of lung cancer?
- A. Yes, very aggressive. It's clinically probably more virulent, more aggressive and more
- 6 rapidly killing than either a squamous carcinoma or
- 7 an adenocarcinoma, both of which are quite
- 8 aggressive in and of themselves.
- 9 Q. Now, Dr. Swanson, how do the
- 10 characteristics of adenosquamous carcinoma compare
- 11 with the case we have just been reviewing of
- 12 Mr. Williams?
- 13 A. Well, they don't fit at all. The
- 14 location, obviously, is way off. This was not a
- 15 peripheral tumor. This was a very central, really
- 16 tracheal tumor. And in the fact that we can see
- 17 this tumor present in 1991, it was clearly a
- 18 slow-growing tumor. It demonstrated a rather rapid
- 19 growth phase between January and late 1996, but
- 20 its -- its early development was quite slow. And
- 21 adenosquamous just doesn't do that.
- Q. Dr. Swanson, do any other bronchial
- 23 carcinomas come to mind as a differential diagnosis
- 24 to adenosquamous carcinoma of the lung?
- A. Yeah, absolutely.

- The major differential diagnosis, when you are dealing with tissue that shows you this combination of both the adeno-glandular type differentiation or specialization and the squamous-type specialization. When you can see both of those colliding in the same tumor, the classic diagnosis, the question you ask yourself is: Is it an adenosquamous or is it a mucoepidermoid carcinoma?
- 10 Q. And could you briefly describe for the 11 jury the characteristics of mucoepidermoid 12 carcinoma on the exhibits next to you?
 - A. Yeah, in terms of its location?
- 14 Q. Correct.

- A. Yeah. Mucoepidermoid carcinoma of the tracheal bronchial tree, this is, because mucoepidermoid carcinoma can arise in other organs, also, most typically the salivary glands, but within the tracheal bronchial tree, it is exactly a central tumor that effects either the distal trachea or the very -- what we call proximal, the early major branches of the trachea, the main stem bronchi and perhaps the lobar bronchi.
- Q. And does it occur inside the airways?
- 25 A. Yes. It typically begins and invades

1 into the airway. Q. And what about its course or behavior? 3 Is it -- how aggressive it is? A. Well, there are two major divisions of 5 mucoepidermoid carcinoma of the tracheal bronchial tree that are described. One we call low-grade. 7 The other is high-grade. And the clinical 8 evolution of these two tumors is quite different. 9 First of all, these tumors, 10 mucoepidermoid carcinomas, can be found at any age 11 group. It's a tumor that is even found in 12 children. 13 And in the low-grade type tumor it can 14 evolve over a longer period of years in a very 15 slow-growing fashion. Under the microscope this 16 corresponds to cellular architecture that is still 17 fairly well preserved and there's more of this 18 specialization of the cells visible. 19 The high-grade or more virulent type 20 tumor is more of the poorly differentiated tumor, is much more aggressive in terms of its local 21 22 invasion in terms of its spread to the lymph nodes, 23 and in some cases even spread to other organs, 24 though that is not as frequent.

And the prognosis, obviously, between

- 6 because of its proximal location, is virtually
 7 never resectable and is frequently lethal in a very
 8 short period of time.
- 9 Q. Dr. Swanson, using those characteristics 10 of mucoepidermoid carcinoma, how do they compare 11 with the findings that we have described in this 12 case relating to Mr. Williams?
- 13 A. Well, they are virtually superimposable. 14 The classic mucoepidermoid carcinoma, particularly 15 high-grade in its later phases, is exactly what 16 Mr. Williams' clinical course represented.
- Q. Now, Doctor, do you have an opinion, based on the medical information in this case, as to whether Mr. Williams had a mucoepidermoid carcinoma high-grade or an adenosquamous carcinoma of the lung?
- 22 A. I'm convinced he had a high-grade 23 mucoepidermoid carcinoma.
- Q. Doctor, what have you determined about the relationship of smoking with these two tumors,

- 1 that is adenosquamous carcinoma of the lung and 2 mucoepidermoid carcinoma?
- A. Well, adenosquamous carcinoma behaves or derives much the same as a standard squamous cell carcinoma or an adenocarcinoma of the lung, and there is or does seem to be a relationship between smoking and the development of an adenosquamous carcinoma.
- 9 The mucoepidermoid clearly has no 10 relationship to smoking, and, as I said, is even 11 found in children. And no relationship to smoking 12 has ever been demonstrated with that tumor.
- Q. Now, Dr. Swanson, you mentioned mucoepidermoid carcinoma also occurs in the salivary glands?
- 16 A. Right. Actually, when you read pathology 17 books on mucoepidermoid carcinoma of the lung, it's 18 frequently referred to as a salivary-type tumor. 19 It's much more frequent in the salivary glands.
- 20 Q. Okay. Is smoking related to 21 mucoepidermoid carcinoma of the salivary glands? 22 A. No, it's not. And you might think tha
- A. No, it's not. And you might think that it would be because the salivary glands are exposed to the airway also. I mean, the smoke obviously comes in contact with them.

- Doctor, would there have been any Q. 2 difference in treatment in this case if 3 Mr. Williams' tumor would have been diagnosed as a 4 mucoepidermoid carcinoma high-grade instead of an 5 adenosquamous carcinoma? No. Unfortunately, the outcome would 7 have been exactly the same. Because of the 8 position and the extent of the tumor, we call this 9 a Stage 3-B cancer.
- Actually, the tumor itself we refer to as 10 $11\ T-4$. That is all nomenclature in terms of what we 12 call staging whereby we evaluate how advanced tumor 13
- 14 And Stage 3-B is a very advanced tumor, 15 and this particular one is a T-4 tumor, in 16 particular, is unresectable.
- So, that automatically puts it into the 18 realm of, you know, giving chemotherapy and 19 radiation and see what you get.
- Q. All right. Dr. Swanson, do you have an 20 21 opinion as to the location, the place of origin of 22 Mr. Williams' mucoepidermoid carcinoma?
- 23 A. Yeah. It seems quite clear to me the 24 tumor probably originated in the lower trachea at 25 the level of the carina or just above. It's kind

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1 of hard to say.
        Q. Could you point that out to the jury?
        Α.
             Oh, sure.
             Well, the first x-ray that evidence we
5 saw of that on that lateral chest x-ray in 1991
6 represents a divot in the back of the trachea right
7 at about that level. Okay.
8
             This little apex again is what we call
9 the carina, and the bifurcation of the trachea.
10
            So, in my view, it seems quite clear that
11 that is where the tumor started.
12
     Q. Dr. Swanson, do you have an opinion as to
13
   whether smoking is related to Mr. Williams'
14 mucoepidermoid carcinoma?
15
        A. Well, there's no scientific evidence of a
16 relationship to any mucoepidermoid carcinoma. So,
17 no, it is not.
             MR. SIRRIDGE: That is all I have, Your
18
19
     Honor.
20
             THE COURT: Thank you.
21
             Mr. Gaylord.
22
             MR. GAYLORD: Thank you, Your Honor.
23
24
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CROSS-EXAMINATION

1 2

8

14

3 BY MR. GAYLORD:

- Q. Dr. Swanson, you are the first physician we have heard from who's involved in a specialty that actually didn't take place and wasn't involved in Jesse Williams' care?
 - A. Too bad for him.
- 9 Q. Well, you're not suggesting that he 10 should have had a surgeon?
- 11 A. No. No, absolutely not. I'm just 12 suggesting that when a tumor is resectable a 13 patient has a much greater chance of survival.
 - Q. Sure.
- 15 A. Surgeons like to say a chance to cut is a 16 chance to cure.
- 17 Q. You are not suggest that smoking doesn't 18 cause cancer to occur in the location where this 19 cancer occurred, are you?
- A. I think I testified that smoking causes or at least is highly related to a number of cancers of the lung.
- Q. Including ones that would occur right where this one did?
- A. Conceivably.

- Q. And you're not suggesting that, at least based on your knowledge of the applicable specialties, that you would say that it's impossible for adenosquamous carcinoma to occur in the location where Jesse Williams' tumor was?
- 6 A. In biology, nothing is impossible. It's 7 just highly unlikely.
- 8 Q. Yours is not the specialty that spends 9 time studying questions like where do different 10 kinds of cancer occur in a person's lung?
- 11 A. I don't know that I agree with that. 12 Mine is the specialty that incorporates all of the 13 different evaluations of a tumor to try and provide 14 some treatment for it.
- Q. Well, let me follow up with that, 16 Dr. Swanson.
- I think you and I just met during a break this morning, and we don't know each other, and I don't know that much about you. But I think I know a little bit about your group because, as you said, you are very well known?
- 22 A. Yes.
- Q. You would agree, wouldn't you, that your group is well known first and foremost because of Albert Starr?

- 1 A. Absolutely, going back to 1961.
- Q. And '96 was when he invented one of the first heart replacement valves?
- A. First successful heart valve, yes.
- 5 Long-term successful heart valve.
- Q. And he and the surgical group that grew up around him has been known ever since that time for heart valve replacements and open heart surgeries?
- 10 A. And excellent chest surgery.
- 11 Q. All right. Well, we know from your 12 testimony that 90 to 93 percent of the time the 13 chest surgery you do is on hearts and heart valves?
- 14 A. Yes. That is because of my particular 15 affinity and because of the fact that heart disease 16 is so much more prevalent than lung esophageal 17 aortic disease.
- 18 Q. Well, actually isn't it also true that 19 heart disease and heart valve and open heart 20 surgeries are the thing that your surgical group is 21 known for and referred to for to the greatest 22 extent?
- 23 A. I expect that most people know us best 24 for heart surgery, yes.
- Q. Okay. When you made the statement that

- 1 you do more of these surgeries than anyone west of
- 2 Houston, you were referring to heart surgery?
- A. And chest. Well, chest surgery as a
- 4 whole. Certainly, heart surgery makes up, as I
- 5 said, greater than 90 percent of what we all do.
- Q. Well, you wouldn't make that statement about lung cancer surgery? You wouldn't say that
- 8 your group does more lung cancer surgery than
- 9 anybody west of Houston?
- 10 A. No, I wouldn't.
- 11 Q. And there are surgeons who, in fact,
- 12 specialize and concentrate on lung cancer surgery
- 13 to the same degree that you and your group
- 14 specialist in heart surgery?
- 15 A. I don't you know of any in this setting.
- 16 There is not enough lung cancer for a guy to
- 17 specialize in just that.
- 18 Q. It sounds like Mr. Sirridge was asking
- 19 you kind of how you got involved in this case. I
- 20 heard Mr. Dumas' name mentioned, James Dumas?
- 21 A. James Dumas, yes.
- 22 Q. You and he were acquainted before this
- 23 case?
- 24 A. Actually, he had asked me to review a
- 25 case before, and I was a little surprised he called

- $1\,$ me back because I rendered an opinion that was
- 2 damaging to his client in that particular case.
- Q. Okay. But you had known him from before this case, and that is the connection?
 - A. I reviewed that case.
- 6 Q. As far as you know that is what got you 7 invited into this case?
- 8 A. Yes.

- 9 Q. Now, you talked a lot about your -- I 10 shouldn't say a lot. You talked the usual amount 11 about your background and training and experience 12 and so forth, and you said you published something 13 roughly 20 articles?
 - A. Something like that, yeah.
- 15 Q. Been involved in publication.
- 16 I have what comes off of the Internet 17 when you search your name as an author for
- 18 articles. And it shows I think I counted 11
- 19 headings. I don't know if that is complete or not?
- 20 A. It can't be complete. My CV I know has
- 21 more than that, and even my CV isn't up to date.
- Q. You are welcome to look at this before
- 23 you answer this. I know where I got that; it says
- 24 11 citations counted, the way the Internet breaks
- 25 it up.

- 1 My question is: I didn't see any of the 2 topics on here being related to lung cancer
- 3 diagnosis?
- 4 A. Lung cancer diagnosis, I don't think I 5 have published on, no.
- Q. Okay. There's -- and to the extent that I can even tell what these topics are, they sound to me like they are mostly heart surgery topics?
- 9 Would that be fair?
- 10 A. Mostly. There's some research on cancer 11 that I did in rats.
- 12 Q. That is about mastectomies?
- 13 A. Yes.
- Q. Breast cancer?
- 15 A. Yes.
- 16 Q. Okay. That was in 1986 during your
- 17 fellowship?
- 18 A. Yes.
- 19 Q. But what I see are ball valve experience
- 20 over three decades. That is a heart valve issue?
- 21 A. It is.
- Q. Cardiomyoplasty? Dynamic
- 23 cardiomyoplasty?
- 24 A. Heart failure.
- Q. Heart failure issues.

- Reversed bevel technique for anastomosis at the aortic arch. That is a thing about how you ——
- 4 A. Put the aorta back together.
 - Q. In a heart surgery?
 - A. Well, aorta surgery.
- 7 Q. Okay.

- 8 I can't find any of the rest of them that
- 9 I can pronounce. Oh, here's one. Comparative
- 10 evaluation of aortic valve replacement with Starr,
- 11 Bjork, and porcine valve prostheses? Heart valves?
- 12 A. Heart valves.
- 13 Q. Okay.
- When you do get involved in a case
- 15 involving lung cancer, do you work with other
- 16 physicians in other specialties in that subject?
- 17 A. Oh, absolutely. Cancer, as a whole, has 18 to be approached as a multi-modality team approach.
- 19 Q. And would it be fair to say that in a
- 20 lung cancer case you probably work with
- 21 pulmonologists?
- 22 A. Yes.
- 23 Q. Those are the specialists in subspecialty
- 24 of internal medicine who deals with lung disease
- 25 from a non-surgical standpoint?

- 1 A. You bet.
- Q. And they have a special expertise in diagnosing lung cancer and in dealing with appropriate treatment for it?
- 5 A. They have special expertise in dealing 6 with pulmonary problems. That is all they do.
- 7 Q. In terms of how often a pulmonologist in 8 practice in Portland is dealing with patients with 9 lung cancer, they probably see patients every 10 single day that have lung cancer, don't they?
- 11 A. Much more frequently than a surgeon would 12 see them, because so many patients with lung cancer 13 like Mr. Williams are beyond the scope of surgery 14 by the time they are diagnosed.
- 15 Q. Okay. And so if you were the surgeon 16 consulting on a case of lung cancer, you would 17 consult with Dr. Turner, for example?
- 18 A. Typically --
- 19 Q. I'm not sure -- I'm not quite finished.
- 20 A. Okay.
- 21 Q. Let me make sure I got the thought out
- 22 here so we are talking about the same thing.
- 23 A. Sure.
- Q. If you are the surgeon consulting in a
- $25\,$ lung cancer case and Dr. Turner was the

- 1 pulmonologist, you would defer to him for certain
- 2 issues that derive within his specialty?
- A. Well, defer to is perhaps a stretch, but 4 I would certainly respect all of the information 5 that he had gathered and would integrate into my 6 own approach to any given patient.
- Q. Okay. You mentioned that from time to time you do bronchoscopy procedures yourself?
- 9 A. Um-hmm.
- 10 Q. But pulmonologists do that very 11 frequently?
- 12 A. Much more frequently than we do, yes.
- 13 Q. Similarly, in a given case of lung
- 14 cancer, there would be pathologists involved?
- 15 A. Yes.
- 16 Q. And pathologists are the specialists who 17 look at the tissue under the microscope and decide 18 what to call it?
- 19 A. Absolutely.
- Q. And do you know Daisy Franzini?
- 21 A. I don't know her, no.
- Q. Do you know that she is chief over at
- 23 Legacy Good Samaritan?
- A. Yes, that is what I have heard.
- Q. Do you know any reason why her opinion

- 1 shouldn't be respected as a highly-qualified board
 2 certified pathologist?
- A. No reason whatsoever.
- Q. Same with Dr. Ken Oyama? Do you know 5 him?
- A. I believe I knew and worked closely with Dr. Oyama's father, but I'm not certain, but, yeah I know that who he is.
- 9 Q. And in a case of yours, as a surgeon in 10 Portland, Oregon, if you had a patient with lung
- 11 cancer and a couple of local pathologists of the
- 12 quality and reputation of Dr. Franzini and
- 13 Dr. Oyama made the call as a matter of pathology,
- 14 you would respect that opinion and rely on it?
- 15 A. I would certainly respect the opinion,
- 16 yes. Relying upon it 100 percent is always
- 17 something that, you know, has to be taken with some 18 relativity.
- 19 Q. Okay. Well, in terms of the pathology 20 part of the picture?
- 21 A. Yes.
- 22 Q. You don't look at the slides yourself as
- 23 a surgeon?
- 24 A. Oh, absolutely. I mean not on a routine
- 25 basis. That is for sure. But I'll tell you if

- 1 there was a patient that had an unusual tumor like
- 2 an adenosquamous or a mucoepidermoid, you bet, I
- 3 would go and sit down with the pathologist, and we
- 4 would look at it through -- they have special
- 5 microscopes. They are teaching microscopes. They
- 6 can be looking through it and they can be showing
- $7\,$ me with a pointer exactly what they see an what
- 8 they think.
- 9 Q. And you would be essentially the student 10 and they would be the teacher in terms of what they
- 11 see and what they are calling it?
 12 A. Yes. Yes. But we would discuss it in
- 13 more depth. It wouldn't be just like looking at a
- 14 piece of paper and saying oh, yeah, okay, that is
- 15 it.

- Q. Okay.
- 17 A. You know.
- 18 Q. In a lung cancer case occurring in
- 19 Portland, Oregon in one of the local hospitals with
- 20 a local pathologist, reading the slides, your
- 21 routine is to use and rely on the local people for
- 22 their expertise in pathology?
- 23 A. Yes, if they are comfortable. And when
- 24 they are uncomfortable or if, in discussion of the
- 25 overall clinical picture, we come to an

- uncomfortable conclusion, second opinion, sending
 out to, you know, to some respected pathologist
 somewhere else for a second opinion is a reasonably
 common thing.
- Q. Okay. But that is, again, that is where in your consultation within the pathologist they reach a point where they can't be sure what they are calling it?
- 9 A. Sure. Or they may have even come to that 10 conclusion before talking to me.
- 11 Q. Okay. And similarly, radiology is a 12 separate specialty of medical practice. As a 13 surgeon, I'm sure, you read a lot of x-rays?
- 14 A. Lofts of x-rays. Every one of my 15 patients gets a pre-operative chest x-ray that I 16 review before surgery. And they get at least one 17 and frequently two or three chest x-rays before 18 they leave the hospital. I review every one.
- 19 Q. Sure. And you also have radiologists who 20 contribute to your practice and your knowledge 21 about patient care?
- 22 A. You bet.
- Q. And in a typical case every film that is taken of your patients read by a board certificate radiologist?

1 A. Yes.

7

- Q. And those are people you put faith in and accept their advice about what they see on x-ray?
- A. And the reason I go to look at those chest x-rays, in addition to their advice, is because I have seen them miss it.
 - Q. Sure.

8 With respect to levels of qualification 9 in reading chest x-rays, are there subspecialists 10 in chest x-ray reading?

11 A. Yes. I think within any large -- I mean, 12 every board certified radiologist is going to have 13 expertise in reading chest x-rays, just as every 14 board certified cardiothoracic surgeon is going to 15 have expertise reading chest x-rays.

But within any medical practice, just as
I told you that within my group I tend to gravitate
more toward doing valve surgery, within any x-ray
practice, certainly within any one of the large
Portland hospitals there are going to be people who
are more of the CT guy or more of the angio,
angiogram person, MRI person, the x-ray person.

23 There is some specialization that takes place. 24 Q. If you had a tough call to make in

25 looking at a lateral chest x-ray about whether or

- 1 not there was a change in the posterior tracheal
 2 stripe that was significant, would you go to
 3 somebody in the local area with real chest x-ray
 4 special --
- 5 A. You bet. I would be down in our x-ray 6 department immediately.
- Q. Okay. You might go to somebody like the chest x-ray specialist in the department at OHSU?
- 9 A. I probably wouldn't go to the OHSU for 10 chest. The OHSU used to have the best
- 11 interventional angiographer in this city, but
- 12 otherwise they haven't been known for any
- 13 particular expertise in radiology.
- 14 I would go my own guys at St. Vincent
- 15 Hospital. They see way more of it than they do at 16 Oregon Health Sciences University.
- 17 Q. I thought you worked in the transplant 18 program at OHSU?
- 19 A. I did, absolutely.
 - Q. And also with the V.A.?
- 21 A. Yes.

- Q. And when you were working with patients
- 23 in those facilities you would expect x-rays to be
- 24 read by the radiology department at OHSU?
- A. Sure. Every hospital is going to have

- 1 its own reading of their hospital's x-rays. I'm
 2 just telling you that, from my perspective, I have
 3 experience in a lot of different hospitals in this
 4 country and many other countries, and I have run
 5 into a lot of different levels of expertise.
 6 And in this city, I would take that film
 7 to someone at St. Vincent Hospital. The OHSU and
 8 the V.A. Hospital don't see nearly the volume of
 9 patients that we do.
 10 Q. Okay. Is it important to you when
 11 seeking out a consultant for their opinion to thin
- 10 Q. Okay. Is it important to you when 11 seeking out a consultant for their opinion to think 12 about what volume of patients in a particular 13 category of health issue they have?
- A. Well, within certain procedural
 techniques, angioplasty, for example, if I was
 going to have an angioplasty done on my coronary
 arteries, within that kind of an interventional
 manual technique, there is a direct relationship
 between volume and expertise and the facility with
 which an operator can do something. The same thing
 pertains to surgery.
- That is not necessarily the case for what are referred to as cognitive specialties, where it is more of a matter of how smart the guy is or, you know, what their previous experience entails.

- 1 Q. Just a couple more questions, I think, 2 before the noon break, Doctor.
- 3 You just said what mattered more is how 4 smart the quy is.
 - A. Or girl.

- Q. Okay. How smart the guy or girl is.
 If you were looking for somebody to share
 with you the best available information about an
 issue like, say, smoking and health, would you seek
- out somebody who has special experience and interest in subjects related to smoking and health
- or would you look to a generalist in some field who occasionally comes across it?
- 14 A. What do you mean by a smoking and health? 15 Just the general broad category of how smoking 16 effects health?
- Q. Well, if you were looking for someone to enlighten you to the best possible degree about questions like did smoking cause a given lung cancer case, what is the way in which smoking shows up as lung cancer, what are the lung cancers that cause or that are cause and associated by smoking, what are the locations of lung cancer that smoking might have caused, how do you distinguish a tumor that could or couldn't be caused by smoking, all of

- 1 the diagnostic issues and preventions of smoking
 2 and health have people with special expertise in
 3 them, practicing medicine in specialties, don't
 4 they?
- 5 A. Sure. And that is why, when it came to 6 reviewing adenosquamous carcinoma and 7 mucoepidermoid carcinoma, I sought out the opinions

8 of the experts and I have their literature.

- 9 Q. If you were presented with that kind of 10 question in your practice in Portland, Oregon, 11 wouldn't you go to, for example, an oncologist with 12 lots of experience in lung cancer and smoking and
- 13 health issues?

 14 A. Maybe. If I knew who he was or had

 15 worked with him. I would probably -- the first

 16 thing I would do is sit down at my computer and
- 17 punch up the Internet.
 18 Q. If you had a patient in your care at OHSU
- 19 and you had an issue about whether their tumor in 20 their lungs was caused by smoking or not?
- 21 A. Yes.
- Q. Wouldn't you go to the oncology department at OHSU?
- 24 A. I know exactly who I would go to at OHSU, 25 Bill Fletcher.

- Q. He's one of those surgeons that really 2 deals a lot of time with lung cancer questions?
- A. He is the surgical oncologist at the OHSU 4 and has a wealth of experience over years of 5 practice.
- Q. Okay. Would an oncologist like 7 Dr. Gerald Segal, who was long on the staff at OHSU 8 before his private practice, be somebody that you 9 would think deserves respect on the question of 10 causation of the given lung cancer?
- A. I don't have any personal experience 11 12 working with Dr. Segal, but if he's boarded in his 13 specialty, I would respect his boards.
- 14 Q. Would you respect the fact that he was 15 board certified, trained at Fred Hutchinson Cancer 16 Center and the patient's care giver in the case? 17

MR. SIRRIDGE: Objection.

18 THE COURT: Excuse me.

> Dr. Segal has testified. The form of your question can be running afoul of the rule about asking a witness to testify about the credibility of another testifying witness. You need to depersonalize your question.

24 MR. SIRRIDGE: Thank you, Your Honor.

25 BY MR. GAYLORD:

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Q. Let me try to rephrase this, and then
2 we'll stop for the break, Doctor.
             Do you put any credence in the fact that
4 a given physician with applicable expertise and
5 training, knows the patient and treats the patient,
   as having some bearing on their ability to make an
7 accurate diagnosis of the cancer?
8
        A. Certainly. Knowing the patient is
9 helpful, if it gives you insights into his family
10 history, personal history, his own medical
11 problems.
            MR. GAYLORD: That is maybe a break, Your
12
13
     Honor.
14
             THE COURT: Can you give me an idea how
15
    much further on cross?
            MR. GAYLORD: I don't think more than 20
16
17
18
             THE COURT: Jurors, can we take up at
19
     1:15? Yes. All right. Chairs and notes on the
     chair. Please don't discuss the case. See you
20
21
     at 1:15.
22
23
        (Whereupon, the jury exited the courtroom
24
      and the proceedings continued, as follows:)
25
                          * * *
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THE COURT: Anything for the record? 1 2 MR. GAYLORD: No, Your Honor. MR. SIRRIDGE: Your Honor, one thing. 4 The defense would be offering for admission this 5 exhibit which was talked about this morning, 6 Exhibit 624, into evidence. 7 THE COURT: Mr. Gaylord. 8 MR. GAYLORD: I would object to it into 9 evidence. I think it's been used for 10 demonstrative purposes, but it's no more valid 11 substantively as evidence than a drawing on a 12 board. I mean, if we are going to put all of the 13 diagrams drawn by witnesses into evidence, maybe 14 that would be different, maybe. 15 MR. SIRRIDGE: Your Honor, can I respond? THE COURT: Of course. 16 17 MR. SIRRIDGE: This exhibit is relevant 18 to several issues in the case, and secondly it's 19 been properly identified, and the foundation for 20 its admission has been made. 21 Mr. Gaylord's point really more is to 22 weight and credibility, and that is really for 23 the jury to decide. 24 THE COURT: May I see the exhibit? 25 MR. SIRRIDGE: Yes.

MR. GAYLORD: My other comment would be 1 2 that it's a summary of testimony. That puts it 3 out of context of the --4 THE COURT: The exhibit may be received. 5 In my view, it is kind of a helpful aid that will 6 assist the jury in understanding expert witness testimony. And to the extent that is a standard 7 8 that we'll apply to other drawings and exhibits, 9 it may be applied to then. 10 MR. SIRRIDGE: Thank you, Your Honor. MR. GAYLORD: Can I make one more 11 12 sentence of record on my objection to it? THE COURT: Sure, but I ruled without 13 14 your sentence, so I might have to reconsider. 15 MR. GAYLORD: I understand. My cocounsel 16 just reminded me it's also a significant 17 enlargement from the actual exhibit, and the 18 x-rays themselves are in evidence. This puts 19 undue emphasis on things that some witnesses 20 believe they see on the x-rays, in part, by 21 making them bigger than life. That is a typical 22 thing we do with demonstrative evidence, but I 23 don't think it ought to go to the jury for the 24 risk that it misrepresents what these things 25 really are to be seen.

THE COURT: That does go to its weight. 1 2 This exhibit, for the record, is enlarged photography of some x-rays which have been 3 4 discussed with the jury. 5 There are markings on the exhibit in the 6 form of witness's emphasizing certain parts for a 7 particular point. 8 The jurors are not radiologists, and they 9 are not physicians, and it's just my view that 10 the exhibit is helpful for the jury to recall

what it is was being emphasized.

Now, that may be true as to a number of the aids that have been used throughout the last four weeks. And if a party believes that any of those aids ought to be offered as substantive evidence because it's uniquely helpful, I'll consider that. But I don't see that there's any prejudice. And I suspect if we didn't send this one to the jury they would send out a note wanting to see it, along with a lot of the other documents.

We need you back at 1:15, Doctor.

Mr. Tauman?

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MR. TAUMAN: Nothing. Thank you.
THE COURT: All right. Thank you.

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1 STATE OF OREGON
                          )
                          )
                             SS.
 2 County of Multnomah
                          )
              I, Jennifer Wiles, hereby certify that I
 4
 5
     am an Official Court Reporter to the Circuit
 6
     Court of the State of Oregon for Multnomah
     County; that I reported in Stenotype the
 7
 8
      foregoing proceedings and subsequently
 9
     transcribed my said shorthand notes into the
10
     typewritten transcript, pages 1 through 128, both
11
      inclusive; that the said transcript constitutes a
12
      full, true and accurate record of the
13
      proceedings, as requested, to the best of my
14
      knowledge, ability and belief.
15
              Dated this 15th day of July, 1999 at
16
      Portland, Oregon.
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                     Jennifer Wiles
                     Official Court Reporter
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